



EXCAVATIONS AT TEPE GAWRA

VOLUME II

ARTHUR J. TOBLER

THE UNIVERSITY MUSEUM
UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA

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Tepe Gawra, looking southeast.
The high part of the mound at the right represents the level of Stratum X.

MUSEUM MONOGRAPHS

EXCAVATIONS

AT

TEPE GAWRA

*Joint Expedition of the Baghdad School
and the University Museum to Mesopotamia*

By ARTHUR J. TOBLER

VOLUME II
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INTRODUCTION

The first volume of the present series of publications reporting on the excavations at Tepe Gawra, a mound about fifteen miles northeast of Mosul, Iraq, was devoted to an account of Strata I through VIII.¹ Those levels had been uncovered in the course of two seasons' work, in 1931 and 1932, in addition to an initial trial dig of fifteen days in 1927, when a sounding trench had been excavated on the southeast slope of the mound. The present work is an account of the excavations conducted at Gawra in the years 1932 through 1938. In the five campaigns undertaken during that period Strata IX through XX were investigated, in full or in part, in addition to certain areas at the base of the mound, where remains still earlier than the period represented by Stratum XX were discovered.

The expeditions which uncovered Strata I through VIII were under the direction of Professor E. A. Speiser, of the University of Pennsylvania, then on leave of absence from his teaching duties. With his return to Philadelphia in 1932, the task of leading the Gawra expeditions was assigned to the late Mr. Charles Bache, who had assisted Dr. Speiser in the campaign of 1931-32. Mr. Bache was aided in the third season's work, which began on November 2, 1932, and ended April 4, 1933, by his wife, Mrs. Elisabeth B. B. Bache, registrar; Mr. Paul Beidler, architect and assistant director; Mr. E. Bartow Müller, architect; Dr. Immanuel Ben-Dor, field assistant; Mrs. Stella Ben-Dor, chemist and restorer; and Dr. Arthur C. Piepkorn and Dr. Cyrus H. Gordon, epigraphers. This large staff was required because excavations were carried on concurrently at Tell Billa, a later site a few miles to the east.² Work at Billa was discontinued the following season, which began November 7,

1934, and ended February 27, 1935. The expedition personnel was thus correspondingly reduced; in addition to Mr. and Mrs. Bache, it included Mr. E. Bartow Müller, architect; Dr. Cyrus H. Gordon, field assistant; and Mr. Henry A. Schuchart, Jr., artist. The fifth season began November 2, 1935, and came to a close on February 15, 1936. Mr. and Mrs. Bache and Mr. Müller again formed the nucleus of the staff, which also had Mr. M. E. Wright, Jr., as artist, and Mr. W. A. Taylor, Jr., serving as photographer. During this campaign excavations were carried on for five days at a neighboring mound, called Kara Tepe, where remains of the so-called Tell Halaf period were discovered. All pottery and other objects from this site were presented to the Department of Antiquities of the Iraq Government.³

The sixth season saw an almost complete change of staff. Dr. Speiser returned to Gawra after an absence of nearly five years to direct the work of the expedition, and was assisted by Mr. E. B. Müller, architect; Mr. Alfred Bendiner, artist; Dr. A. Bergman, Thayer Fellow of the Jerusalem School, field assistant; and the writer, who served as registrar and photographer. During the early part of that season, which lasted from October 12, 1936 to March 19, 1937, a few weeks of work were devoted to Tell Billa,⁴ and three weeks were spent by the staff at Khafājeh, on the Diyala River, northeast of Baghdad, where excavations were made in Early Dynastic remains under the field direction of Mr. Pierre Delougaz. The seventh and last campaign to Gawra was directed by Mr. Bache, aided by Mrs. Bache, registrar; Mr. Müller, serving his fifth consecutive season as architect; Mr. Alberto Davico, artist; and the writer as general assistant and photographer. That season began on November 1, 1937, and was temporarily halted on December 15, when the entire staff left Gawra to continue work at Khafājeh,⁵ again under Mr.

¹ Publications of the American Schools of Oriental Research, *Excavations at Tepe Gawra, Volume I*, by E. A. Speiser. University of Pennsylvania Press, 1935. A description of the location of Tepe Gawra may be found in the Introduction to that volume, pp. 1-2.

² *BASOR.*, 49, pp. 12-14; *ibid.*, 50, pp. 3-7; *ibid.*, 51, pp. 20-22, or earlier work at Billa cf. *MJ.*, XXIII, No. 3, pp. 249-83.

³ *BASOR.*, 58, p. 9.

⁴ *BASOR.*, 64, p. 4; *ibid.*, 68, pp. 10-12.

⁵ *BASOR.*, 70, pp. 7-10; *ibid.*, 71, pp. 18-20.

Delougaz. Excavations were resumed at Gawra on March 15, 1938, and continued until May 7 of that year. All these expeditions were jointly sponsored by the American Schools of Oriental Research and the University Museum of the University of Pennsylvania. In addition, the work of the third and fourth seasons was further supported by contributions from Dropsie College of Philadelphia.

The original plan of excavation at Gawra called for the full and systematic investigation of the whole mound, layer by layer. In accordance with this scheme Strata I through VIII were completely excavated by Dr. Speiser, and Strata IX and X were likewise fully exposed by Mr. Bache, when he succeeded Dr. Speiser as director. By the time Stratum X-A was reached, however, it became apparent that this plan was no longer practicable. The mound, because of its conical shape, grew steadily wider as each successively lower level was reached, and dumps formed of earth excavated from upper levels required increased attention as the work progressed. As a consequence the excavations were restricted, beginning with Stratum X-A, to slightly more than one-third of the total area of the mound (Frontispiece and Plate XXVIII.a).

The selected area included the northwest to southeast section of Gawra, and lay within Squares 4-6, G-Q; in lower levels the expansion of the slopes of the mound brought this area into Squares 3-6, E-S (Plate I). In this sector, which measured from 60 to 80 metres in length and 35 to 40 metres in width, Strata X-A through XI-A were uncovered, but upon reaching Stratum XII, in the fifth season, a further revision of plan had to be made. The clearing of Stratum XI-A had revealed a segment of a heavy, curved wall in Square 6-M protruding from the scarp formed by the excavations in the two overlying strata. Since this wall suggested the presence of an unusual structure with a circular ground plan, it was decided to uncover it completely, thus necessitating the removal of those parts of Strata X-A and XI which still covered it. Accordingly, when Squares 7 and 8, K-O were cleared of those later remains, and when digging in those squares had reached Stratum XI-A, the Round House—the largest and perhaps the outstanding example of

archaic architecture yet discovered in Mesopotamia—was revealed.

In the following (sixth) season, the area immediately adjacent to the Round House was cleared so that the stratigraphic connections of that structure could be investigated. With the completion of that task, the workmen were again returned to the chosen northeast third of the site to continue the regular excavations into still lower strata. While Strata XII through XVI were being exposed in the northeastern cut, the ever-growing dumps on the slopes of Gawra called for the clearance of sections at its foot where excavated debris from the mound could be dumped without fear of covering any archaeological remains. Two areas were chosen for excavation, one at the northeast foot of the mound in Squares 1-I, K-M, and the other at the southeast in Squares 5-6, A-bb (Plate XXI). Although both sections were completely devoid of walls, a well was discovered at the bottom of the sounding at the southeast base (called Area A) which had been used later as a burial pit. Besides the twenty-four skeletons found within it, twenty-one of which occurred in two crude mass burials, it contained a number of pottery vessels which are the earliest specimens yet recovered at Gawra. Another result of the excavations on the southeast slopes and base was the discovery of the approaches to Stratum VI,⁶ perhaps built on the same path used by the inhabitants of Strata XI and XI-A.

The seventh and last expedition to Gawra in 1937-38 was compelled to reduce the area of exploration from the northeast third of the mound, where Stratum XVI had been exposed, to a sounding area approximately 25 metres square on its eastern edge (Squares 3-5, G-K). Two factors led to this decision. First, the dumps formed by earlier excavations were encroaching in ever greater degree on the stratified remains themselves, so that more and more men were being diverted to the unproductive task of clearing the slopes. Second, the possibility of the outbreak of war led to the hope, which was not to be realized, that it might be possible to reach virgin soil beneath the mound itself, and thus recover the complete history of Gawra, before the season came to a close. Hence three strata were

⁶ BASOR., 64, p. 6.

excavated within the limits of the sounding, viz., XVII, XVIII, and XIX, and preliminary trenches had been sunk into the débris of Stratum XX when the season came to an end. It had been planned to complete the excavation of XX, but hot weather and the promise of better pay elsewhere lured almost all the native laborers away from the dig and prevented the realization of that aim.

In order to supplement the available information on Stratum X-A and the levels lying beneath it, a trench was sunk in the last season across the middle of the unexcavated southwestern two-thirds of the mound. This was ten metres wide, and lay equally in the M and O squares. It was begun in Squares 8-M and 8-O at the floor of Stratum X and was extended to the southeastern edge of the mound in Squares 10 and 11-M, where it connected with the trench dug by Dr. Speiser on the southeast slopes of Gawra during his first full season at the site. When this trench had progressed through the remains of Strata X-A and XI, it was extended through the northwestern portion of the Round House, the end of the trench opening here, in Squares 6-M and 6-O in the scarp formed by the excavations in the selected northeastern third of the mound (Plate XXVIII.b). The sounding trench, which was now nearly fifty metres long, was then carried down through Strata XI-A, XII and XII-A, where excavations were concluded.

This trench was prolific of small objects, and seals and impressions in particular, suggesting that it had been a sector where the inhabitants of the mound in Strata X-A through XII-A had dumped accumulated débris from their settlements. Curiously enough, no walls or other building remains were found in the area explored by this trench, except for a few rooms immediately adjoining the southwestern portion of the Round House, and a disjointed U-shaped wall of Stratum XII lying directly below that structure. A single tomb (No. 7-9) of Stratum X origin was found within the trench; graves were more numerous, particularly on the southwestern edge of the mound.

In addition to these activities on various parts of the mound, as well as at its foot, search for the main Gawra cemetery was pressed in the sixth and seventh seasons, when numerous sounding trenches were

excavated in the plain surrounding the mound. Although the search was unsuccessful, indications were obtained that the cemetery might lie to the west of Gawra, where excavations could not be made at that time.

It is necessary to emphasize here that the present volume is restricted to a presentation of the internal evidence provided by Gawra and is, consequently, descriptive in character. Three factors are responsible for this limitation of scope. First, it has seemed desirable to separate a factual description of the evidence recovered from its interpretation and comparison with the material from other sites. The advantages resulting from such an arrangement are obvious, since it is probably the only satisfactory method of discriminating between fact and theory. Second, the present account, which is concerned with the results of five full seasons of excavation, is based on a fairly large mass of data. It was considered wiser to present that information as fully and completely as possible in a single volume, rather than to attempt to add interpretive and comparative sections in the same work, at the cost of curtailing the description. Third, the excavations reported on in these pages were conducted in the years 1932 through 1938, and there is thus a definite obligation to publish the material without further delay; the addition to this monograph of complementary sections dealing with foreign parallels and the place of Gawra in the larger history of Mesopotamia and the ancient world would inevitably have delayed its eventual appearance.

It must nevertheless be admitted that the descriptive limitations imposed on this work have been overstepped on several occasions. A few parallels, in pottery and other objects, have been drawn from material from the neighboring site of Arpachiyah, and less frequently from other sites. These cover only the most obvious resemblances, and serve to illustrate or explain internal conditions at Gawra, or to support arguments deduced from Gawra evidence; they are not to be considered as exhaustive and complete. It has also been necessary from time to time to refer to the various periods composing Mesopotamian prehistory. But for this no apology is needed. When reference to cultural periods could

not be avoided, we were confronted with a choice between temporary and arbitrary designations such as Gawra Period III and Gawra Period IV, or their accepted names, and the latter have naturally been used. The latest prehistoric period in Mesopotamia, that named after the site of Jemdet Nasr in the south, was determined at Gawra to have spanned Strata VII and VIII-A, while the preceding substratum, VIII-B, marked the end of the second prehistoric period, called the Uruk. These conclusions were made in Volume I, and no new evidence has been found to contradict them. At the risk of anticipating future studies, and in order to define the periods referred to in these pages, it may be stated that the Uruk period has, on the basis of the excavations reported upon here, been found to have had its beginning in Stratum XI-A, where there is a pronounced change in material culture as compared to that of Stratum XII and still lower levels. In Level XI-A unpainted (though not undecorated) pottery becomes the rule, and a distinctive type of temple architecture is introduced. There is, moreover, an important mortuary custom typical of this period, namely, the practice of interring the dead within tombs made of brick or stone. These characteristics are to be found in all succeeding strata until Stratum VIII-A and the Jemdet Nasr period is reached. The end of the third prehistoric period occurs in the stratum directly underlying XI-A, viz., Stratum XII. That period, called the Obcoid, is distinguished by a characteristic type of monochrome painted fabric which is found in all lower levels through Stratum XIX. The Obcoid period at Gawra is, therefore, represented by no less than ten building levels which constitute the most detailed and complete record of this culture yet discovered. Stratum XX, however, belongs to still another, earlier period whose often-polychrome ceramic products were superior to those of any other prehistoric period. Named after Tell Halaf in Northern Syria, the Halaf culture is the fourth and earliest to be discovered at Gawra, and is also represented by the deposits of Area A and the Northeast Base.

The various chapters forming this report have self-explanatory headings and include Architectural Remains; Tombs; Graves; Pottery; Terra Cotta Objects; Seals and Seal Impressions; Beads, Pend-

ants, Amulets, and Ornaments; Stone Objects; Copper and Gold Objects; Bone Objects; and a chapter by Drs. W. M. Krogman and W. H. Sassaman on an early skull. The classification of some objects on functional grounds and others according to their material follows the scheme adopted in Volume I, where the reasons for the adoption of such an arrangement were presented. These apply with equal weight to this earlier material; in addition, by retaining the original classification it was hoped to achieve uniformity of treatment within the series. Nevertheless, some rearrangement of the chapters has been made. Owing to the appearance of tombs within some of the present strata, and because of the increased number and importance of graves, the chapters describing these burials have been inserted immediately after the description of the architectural remains. At the same time, the relegation of Copper Objects to the latter pages of this work reflects the rarity of that metal within the strata under discussion. A further departure has been made in regard to objects from the tombs which, unlike those from graves, have been described as a separate group in Chapter II. This procedure was necessitated by the fact that the stratigraphic origin of the tombs represents a problem of some magnitude. By describing the objects from that particular type of burial apart from definitely stratified material a careful distinction between the two has been made, and the tomb furnishings are available for corroboration of conclusions regarding the stratigraphic origins of the tombs which have been arrived at by a consideration of other evidence.

It has been necessary to include in the text of Chapter I a few quotations from field notes by Mr. Bache and Mr. E. B. Müller, the expedition architect. These have been presented in quotation marks, and the initials C. B. or E. B. M. have been appended to identify their source.

The writing of the present account had barely commenced when there occurred the untimely death of Mr. Charles Bache, who had directed the major part of these excavations. As a result, I have been unable to check many details with the only person having full knowledge of them, and whose assistance would have proved invaluable. I have, however,

enjoyed the collaboration of other members of the expedition staff. To Dr. E. A. Speiser, the discoverer of Tepe Gawra and the leader of several campaigns at the site, particular thanks are due for his stimulating interest and encouragement and for numerous valuable suggestions. Mr. and Mrs. Alfred Bendiner kindly assisted in the correction and revision of earlier plans of the strata, and in the preparation of many object drawings. Dr. L. Legrain, formerly Curator of the Babylonian Section of the University Museum, read a portion of the manuscript and made welcome suggestions. To Mrs. William S. Godfrey, Secretary of the University Museum, I wish to express my sincere appreciation of her constant cooperation. The late Dr. George C. Vaillant, Director of the University Museum, was always generous with his help and encourage-

ment. His untimely death, coming shortly after the writing of the present work had been completed, together with a lack of publication funds has delayed the appearance of this volume for nearly four years.

Thanks are also due to Dr. W. M. Krogman, of the University of Chicago, and to Dr. W. H. Sassaman, of Western Reserve University, for their contribution to this study, represented by Chapter XI. Lastly, the generosity of the late Ismail Beg el-Jalili and his son, Dr. Sadiq Jalili, of Mosul, in allowing the expeditions free use of Tepe Gawra and adjacent lands belonging to them, should be gratefully acknowledged, as well as the coöperation of all members of the Department of Antiquities in Baghdad.

A. J. T.

I. ARCHITECTURAL REMAINS

(PLATES I-XXI, XXVIII-XLV)

The factors which dictate the arrangement of this chapter have already been indicated in the description of Strata I through VIII found in Volume I of the present series of Gawra publications. In that volume¹ it was explained that although the most satisfactory arrangement of an architectural description would begin with the earliest strata and proceed through successive occupations, such a method could not be adopted because many levels lay beneath Stratum VIII, then the earliest layer reached by the excavations on top of the mound. Moreover, it was known that certain buildings of Stratum IX were architecturally related to those of the succeeding stratum.

An analogous situation confronts us in the architectural material now awaiting description. The five campaigns at Gawra undertaken in the years 1932-38 resulted in the complete or partial excavation of Strata IX through XIX, but even the preliminary probings into Stratum XX revealed no trace of virgin soil. Indeed, it is certain that several additional occupational layers lie below Stratum XX, representing earlier phases of the same cultural period, the termination of which was witnessed by that level (cf. Chapter IV, pp. 48 and 132). Stratum XX must, therefore, be architecturally related to still earlier, unexcavated layers, thus compelling us to begin the survey of the building remains of Levels IX through XX with Stratum IX. Although, as in Volume I, the historical sequence is reversed by beginning the account with the latest stratum, the descriptive order begun in that volume is continued, thus assuring uniformity of treatment.

The present chapter, however, differs from the architectural description contained in Volume I in one particular: the grouping of the respective strata into appropriate major units; but no explanation or apology for this departure is required. The groups of strata reflect internal architectural relationships, and any descriptive arrangement based merely on

individual strata would be entirely artificial, and would deprive this study of the continuity reflected by the building remains themselves. For this reason, the sixteen strata and substrata falling within the scope of this volume have, in this chapter and in Chapter IV, been divided into six categories, while a seventh includes Area A and the Northeast Base, which represent two sounding areas at the foot of the mound. These were excavated in the season of 1936-37 down to virgin soil in order to provide safe dumping areas for the work proceeding concurrently at the top of the mound. The first six groups of strata include, in the order followed, Strata IX through XI, Stratum XI-A, Strata XII and XII-A, Strata XIII and XIV, Strata XV, XV-A, and XVI, and finally, Strata XVII through XX. Our immediate task, therefore, is to show the architectural ties of the strata within each group, and to describe the building remains of the individual strata. In addition, certain interrelationships between these groups will be pointed out as the discussion progresses.

A. STRATA IX-XI

(PLATES II-V, XXIX-XXXII, XXXIII.a)

Three strata of the present group, viz., IX, X, and XI, were distinguished by temples architecturally related to the Western and Eastern Temples of Stratum VIII. Stratum X-A, on the other hand, lacked a formal religious edifice so that connections between that occupation and succeeding levels are more difficult to establish. But we need not concern ourselves with this question at the moment. It is sufficient for our purposes that Stratum XI, which preceded X-A, furnishes the necessary architectural ties binding all four strata into one unit, so that the hiatus represented by Stratum X-A is definitely spanned.

The correspondence in plan and detail of the Temples of Strata VIII, IX, X and XI are, however, only a few of the factors which establish the unity of Strata VIII through XI. Fully as im-

¹ P. 11.

portant is the fact that the builders of the Stratum X Temples, the Stratum IX Temple, and the recessed walls of the courtyard southeast of the Stratum VIII Central Shrine selected closely adjoining areas for the sites of these constructions, so that their walls would have been contiguous if all three had been simultaneously extant.² This remarkable fact suggests that both the Central Shrine of VIII, and the Stratum IX Temple must have been constructed when at least the lower courses of the walls of the Strata IX and X Temples respectively were still visible above the floors of the new occupation levels. Consequently, neither Stratum IX nor Stratum VIII can have been preceded by a long period of abandonment of the mound; on the contrary, Strata X through VIII must have been closely associated not only in culture, but in time as well.

The evidence linking Stratum XI to the occupations of X, IX, and VIII is sufficiently abundant to establish without doubt the homogeneity of their culture as expressed in building remains. The Temple of Stratum XI had almost all the fundamental architectural characteristics shared by the Temples of X and IX, and by the Western and Eastern Temples of VIII. The fact that the XI Temple cannot be absolutely identified in all of its details with any one of those later buildings does not weaken their ties, for complete identity is not shared by any two of the temples under discussion. Moreover, only four architectural deviations of any importance may be observed in the Stratum XI Temple, and these are differences of detail rather than of basic design. The relationships of the four strata forming the present group with Stratum VIII may thus be regarded as established. It now remains to describe individually the levels comprising the first stratigraphic unit and, in keeping with the sequence adopted in this chapter, the latest stratum takes precedence.

Stratum IX (Plates II, XXIX, XXX). The occupation of Stratum IX was restricted to little more than half of the habitable area of the mound. The precise reason why so little of the available space was utilized is not clear, but the building remains show plainly that the settlement was primarily

religious. This is proved by the presence of a large, well-planned Temple, which measured 13.00 x 11.40m. and occupied a central position in the level. Identification of this building, which covered the major part of Squares 7-8, O-M,³ as a religious edifice is not difficult. Ample evidence is provided by its orientation (the corners of the building pointed to the cardinal points of the compass), its plan, and by such details as its double-recessed wall niches, and the platform or podium in the central chamber. The plan of the structure was featured by a central doorway at the rear of a three-sided entrance court or porch which may have been roofed, but was more probably open to the sky. The main entrance led into the long sanctum, the largest room of the building, where—close to the entrance—was a podium made of a light-colored mixture of clay and cement, measuring 2.70m. in length and 1.46m. wide. Its greatest height was 6cm. The center was strongly fire-marked, while around it were several layers of ashes; presumably it had been used as a ritual or sacrificial hearth. As may be seen in Plate XXIX.a, the podium was rectangular, and bore a roughly anthropomorphic representation incised upon it; it was, furthermore, slightly concave in section. Flanking the sanctum were two long, narrow rooms on each side; the doors leading to these rooms balance each other.

³ It will be observed that the numbers of the squares on the plan of Stratum IX reproduced in *BASOR.*, 54, Fig. 13, and those appearing on photographs taken in the third, fourth, and fifth seasons do not agree with the designations of the squares found on the plans and in the text of the present volume. The discrepancy arises from the fact that different grid systems were adopted at about the same time by Dr. Speiser, then engaged in writing Volume I of the present series (cf. *TG.*, pp. 8 and 9), and by Mr. Bache, who had assumed the task of directing the third campaign at Gawra. The latter continued to use his independent system in the fourth and fifth excavation campaigns, but in the work of the sixth and seventh seasons the square designations of Volume I were reverted to by both Dr. Speiser and Mr. Bache. Since in describing the results of all five campaigns it was patently impossible to follow both systems, for the sake of uniformity I have consistently employed the designations of the squares appearing on the contour map of Gawra reproduced in *TG.*, Plate I which were used throughout that volume, and I have converted all the square numbers appearing in the plans, notes, and object registers of the third, fourth, and fifth seasons to their equivalents on that map.

² *TG.*, Plate XII.

The symmetry of this arrangement is further emphasized by the double-recessed niches⁴ on the outside of the building. Three of these decorated every side of the edifice except the front, where the entrance court or porch was flanked by a double-recessed niche on each side. The bonding of the brickwork forming these niches is illustrated in Plate XXIX.b.⁵

All these details were exactly duplicated in the Eastern and Western Temples of Stratum VIII, so that the religious character of the present edifice is firmly established. More instructive, however, are the architectural differences in these buildings. The first of these to be noted is the reversed position of the Stratum IX Temple as compared to that of its larger successor, the Stratum VIII Western Temple (cf. Plate XXII). Second is the wall in the center of Room 902, and the short wall projection on the southwestern wall of Room 901 (Plate XXX.a). In regard to the former, the most obvious explanation is that it served as the newel wall for a flight of steps.⁶ If so, it is then possible to interpret

⁴Mr. Müller, in *BASOR.*, 54, p. 15 reports: "They serve a double purpose; esthetically they are a relief from the monotony of plain mud-brick walls by giving opportunity for the play of light and shade from the sun, and structurally by reducing the necessary thickness of a *libn* wall and enabling a narrow window to yield more light and air. That there were windows cut in the niches is not wholly conjectural. They have been found in similar niches in Strata VIII-B and VIII-C."

⁵A suggested restoration of the Stratum IX Temple may be found in *BASOR.*, 54, Fig. 14, and p. 18.

⁶Objections against such an interpretation have been expressed by Mr. Müller. His first objection is based on the fact that in this room were found many fragments of seal impressions (Plate CLXIX, Fig. 165), which he believes to be an indication that it had been used as a storage room for offerings brought to the Temple. "Secondly, no traces of the stairs themselves were found, and no matter what material had been used in their construction, had they ever existed, surely some trace would remain. Even wood would have left some carbonized remains. The most plausible explanation is that the wall served as a table or bench for the storage of offerings brought to the temple. . . ." *BASOR.*, 54, p. 15.

On the other hand, the fact that the impressions had all been made by the same seal seems to suggest that the owner of the seal had been connected with the Temple, for offerings brought by many worshipers would have borne different impressions. Nor does the absence of the remains of the stairs prove they had never existed. Roofs and other perishable details of buildings likewise have completely

the wall projection in Room 901 as a buttress against the thrust of the stairs, assuming these to have led to the center, rather than to the front of the building. Finally, the Stratum IX Temple differs from its Stratum VIII counterpart in having had an extension or wing measuring 10.25 x 3.75m. on its northwestern side (Room 904). The secondary nature of this addition is illustrated by its thin walls, irregular outlines, shorter length, and by its wall decoration of simple niches, as compared to the double-recessed niches found on the Temple proper. In order to communicate with this extension, a door was cut through the niche near the northern corner of the Temple, close to the rear of Room 903A. It may have been at the same time that the wall separating Rooms 903 and 903A was cut through, perhaps to convert those rooms into a long corridor terminating at the entrance to Room 904.

One of the most perplexing features of Room 904 is the presence, in the western corner of the room, of a podium made of hard clay. This, like the one in the sanctum, had rectangular outlines, and an anthropomorphic-shaped depression on its upper surface (Plate XXX.b). It was smaller than its counterpart in the same building, being only 1.66m. long, 1.02m. wide, and 3cm. high. The height of this podium, which rose 73cm. above the floor, suggests that it may be accidentally associated with Room 904. Its position in the corner of the room also seems impractical, for it is difficult to see how it could safely have been used for ritual fires. Nevertheless, it cannot be attributed to Stratum VIII-C, for it would there lie outside the Central Shrine, and it must, therefore, belong to Stratum IX.⁷

disappeared except in a few isolated cases. It is even possible that in a later phase of the Temple the presumed upper story was no longer used, and the wooden material forming the stairs was then removed, leaving only the newel wall as proof of its former existence. Cf. the central wall in Room 878 of Stratum VIII-B which was presumed to have been a newel wall, and the curtain wall of Room 801 in the Eastern Temple of the same stratum; *TG.*, Plate X, and p. 31.

⁷"Presumably in connection with this podium (in Room 904) and several metres away from it was a bathroom, measuring $3\frac{1}{2}$ x $2\frac{1}{2}$ metres. In one corner of this bathroom was a large pot sunk into the pavement, its rim even

Additional changes were made at a still later stage in the history of the Stratum IX Temple. The character of these alterations suggests that the building may have been falling into disrepair and disuse, for where additions had previously been necessary, the changes now involve the blocking of all doors leading from the sanctum to all flanking rooms, except to that furnishing access to the stairway-chamber, Room 902. In this way Room 904 was also blocked off, for there is no evidence of other doorways having been cut through the outside walls. The fact that only two rooms, Nos. 900 and 902 (and possibly the upper story), were the only ones now available for use constitutes an almost certain indication that the period represented by Stratum IX was drawing to a close. Certainly it cannot have been long after the abandonment of the Temple that the whole settlement was deserted, for there are no signs to indicate that the edifice was desecrated through conversion to secular uses.

Having traced the history of the Temple through its three phases, we may now turn to other structures of Stratum IX. The most important of these was the complex formed by two thick-walled buildings located in Squares 7-J and 8-J. "This was damaged by two later intrusions; on the one side by the Well and walls of Stratum VI,"⁸ and on the other by the Well of Stratum VIII. The

with the pavement. About two-thirds of the pavement was coated with bitumen, making it water-proof. (C. B.)"

This bitumen-covered floor lay directly over the podium in the central chamber of the Stratum IX Temple, and is thus definitely of a later date, as is proved by its elevation of 12.56m., some forty centimetres higher than the podium, and a half-metre or more above the level of the Temple floor. Its location, if it is to be related to the overlying occupation of VIII, would be almost exactly in the center of the court southeast of the Stratum VIII Central Shrine, which was enclosed on three sides by walls featuring recessed niches. In both particulars of elevation and location, therefore, this floor seems to belong to the later occupation, and may have been used for a ritual washing of feet and hands before proceeding to worship in the Stratum VIII Temples and Shrines.

The L-shaped wall in Squares 5-K and 6-K was formed of two steps, likewise covering with bitumen. Although labeled "Sub-Eight" on the Stratum IX plan, it is possible that this is an IX construction, although its purpose is obscure.

⁸ Cf. *T.G.*, 19 and Plate VIIIa.

walls of this complex were thick; the rooms apparently possessed some regularity and the layout seems to have contained a few elements of formality. Attention must be called to the recessed door leading into the small and peculiarly shaped Room 934, from the courtyard of 935. Rooms 928-933 formed one unit of the complex, while Nos. 927, 934, 935, and 936 formed the second. The walls of these rooms were of far better construction than others in the stratum, making use of two rows of bricks in each course. The bricks themselves were of the same quality and size as those used in the Temple." (E.B.M.)

Rooms 925 and 926, if we may judge by wall-thickness alone, also belonged to this complex, but their function is obscure, since neither contained a door. These buildings were connected with the Temple by a pavement composed of mud-bricks laid two courses deep. This fact, in addition to the thick walls and semiformal plan of the complex, may hint that it constituted a residence for the priests and attendants in charge of the Temple.

The only other buildings of Stratum IX requiring our attention lie on the western edge of the mound in Squares 8-11, M-Q. This group is made up largely of fragmentary rooms, and is featured by three horseshoe-shaped ovens, attesting to its secular character. Most of the rooms are arranged around a central plaza, about ten metres in diameter, which lay directly beneath the Western Temple of Stratum VIII. The walls of the buildings enclosing this area were subsequently cut into by the graves and tombs associated with that Temple (cf. Plate XXII, and Table E, p. 123). The most complete dwelling is that formed by Rooms 905-907. This is also the closest to the Stratum IX Temple, its proximity suggesting that it had been built during the last phase of that edifice, perhaps just before the desertion of the settlement.

Before passing on to Stratum X, it should be noted that the present occupational layer employed brick almost exclusively for its constructions. Stone was sparingly used, and then only in the construction of drains; it is never found in building foundations. Even as a paving material it is rare, the area in Square 8-J being paved with pebbles and sherds. The bricks of Stratum IX usually measure 40 x 20

x 10cm., but slightly larger sizes such as 41 x 20 x 10 and 42 x 21 x 11 were not uncommon, and were found not only in the Temple, but in other Stratum IX walls as well. The *libu* (sun-dried mud-brick) employed were of the same dark brown or reddish-brown color as those of later occupations.

Stratum X (Plates III, XXXI.a). The settlement of Stratum X is the most extensive of any yet described. Featured by a temple and a shrine, the occupation is, nevertheless, primarily a secular one in contrast to the succeeding strata of IX and VIII. Additional contrast between Strata X and IX is afforded in the fact that the Temple of the present level was almost completely ruined, while the Stratum IX Temple was the only complete building of that level. These superficial differences, however, do not affect their unity, which is expressed by similarities in the plans of the Temples of X and IX, by their closely adjoining locations, and by the mere ten- to fifteen-centimetre difference in elevation between the tops of the walls of the X Temple and the floors of the Temple of IX.

The Temple, which measured 12.30 x 11.15m., was discovered in such a ruined condition that most details of its plan have been lost. Four long, and only three short, connecting walls had been preserved to a scanty height of two courses of brick, but these walls reproduce the plan of the Stratum IX Temple in its barest outlines, so that there can be no doubt that we are dealing with a religious structure. In this connection it is worthy of note that a number of streets or passages led to this edifice, suggesting that the town was originally planned around it. Additional features which suggest a religious character for this building are its orientation and the double-recessed niches decorating the exterior of its walls. These have been preserved only on the eastern corner of the Temple, but they must have existed in other walls as well. While in these particulars the religious nature of the building is assured, many other features have been lost in the decay of its walls. Thus there is no means of determining whether the entrance was located in the northeast or in the southwest end of the structure, or whether this entrance lay within a court or porch as in later temples. We may, however, surmise that the doorway was at the northeast, as in

the Western Temple of Stratum VIII, basing our guess on the presence of center walls in the northeast end of Room 1075. These free-standing walls recall the similar constructions in Room 902, at the front of the Stratum IX Temple. Consequently, if any conclusions are permissible on such meager evidence, the central wall of Room 1075 seems to mark the front of the present Temple, whose entrance must thus have been at the northeast end of the edifice, or in Square 7-K. As in the Stratum IX Temple, this central wall possibly served as the newel support of a staircase.

The absence of any cross-walls in Rooms 1075 and 1076 which flank the sanctum suggests one important divergence from the plan of the IX Temple. Here, apparently, the central room was bordered by rooms of equal or greater length, but the scanty wall remains permit no unqualified statements, and it is possible that these rooms had originally been divided into smaller units, the cross-walls either having been destroyed in late alterations or having disappeared in the final destruction of the building. Similarly the pavements of this Temple had also disappeared, so that it could not be determined if the sanctum had been featured by a podium.

All other structures of the present occupational layer, with but a single exception which will be discussed later, were private dwellings. The southwestern and southeastern areas of the mound were wholly unoccupied, apparently for some reason connected with the Temple. The remaining sectors, however, contained numerous buildings which were so closely packed that some communication in the form of streets and passages was required, particularly in the western and northwestern areas. One such passage is located in Squares 10-M and 11-M, extending in a northeast-southwest direction between the long wall bounding Room 1052 and Area 1053, and the compact series of rooms numbered from 1054 to 1070. This group of rooms includes one large and interesting building formed by Rooms 1054-1060, 1066, and 1067 to which, at the south, Rooms 1061-1069 were later added. Several remarkable features characterize this large structure, which must have been the residence of some important person. The unusually thick walls,

the double entrance of the building which opened into the passage just mentioned, the flanking walls of the doorways opening into Rooms 1055 and 1058, the balanced arrangement of the rooms flanking the central chamber,⁹ and the wide recesses on the exterior surfaces of the walls facing the Temple are all unusual details of architectural formality seldom encountered in secular buildings of Gawra. On the other hand, the irregular shape of this structure, which is particularly emphasized by the oblique wall which originally formed its southern end, furnishes a strange contrast to the conventional elements listed above. This, however, is probably the result of practical considerations, for the house was located close to the southern edge of the mound, and its builders were apparently hampered by lack of space.

The main group of Stratum X private dwellings is the least important. Formed of Rooms 1004-1050, lying west, northwest, and north of the Temple, this sector has two streets which break its unity. The first of these separates Rooms 1043-1050, in Squares 9-O and 9-Q, from the larger complex to the northeast. The second and longer street begins between Rooms 1023 and 1024, on the northwestern edge of the mound, and extends to Square 7-M, where it turns to end directly at the Temple.

Only one of the buildings occupying the area tapped by these streets is worthy of mention. This is formed by Rooms 1008-1010, and 1017-1019. Room 1010 is one of the largest rooms of the Stratum X settlement and was entered through a small vestibule (1017) at the northern corner of the building. On the opposite side of Room 1010, at the eastern corner of the house, is a blocked doorway which probably had been one of the main entrances to the building until Rooms 1008 and 1009 were added. The walls of the latter rooms are thin and are not bonded into the southeastern wall of Room 1010, so that they are certainly later additions.

In Squares 5-M and 6-M, on the northeastern fringe of the settlement, is a small group of buildings

⁹ The scraps of walls forming Rooms 1054 and 1056 are later additions, having no bonding with the front wall of the building, and breaking what was originally the main, large room into smaller units.

composed of the structure numbered 1003, a three-sided enclosure (1002), and a small dwelling containing an oven (1000 and 1001). Nos. 1000-1002 are devoid of interest, and are probably later than Room 1003, which is one of the outstanding buildings of Stratum X. "That this was a building of importance is evident from the plan, showing on the northeast face a well-centered entrance, flanked on both sides by a shallow reveal, or niche. The northwest face was, and the southeast¹⁰ probably was accented by flanking buttresses, revealing the thickness of the longitudinal walls. In the interior, on the southwest or rear wall facing the entrance door, but not on axis with it, was a niche that no doubt had its counterpart on the missing end of the same wall. There was, in addition, an unusual feature, difficult to explain. Inside, and covering the whole area of the room, were *libu* bricks to the height of one metre. These bricks had not fallen by accident, for they were found in regular horizontal courses, laid lengthwise with the long axis of the building; i.e., southeast-northwest." (E.B.M.)

Other interesting details of this structure are the orientation of its corners to the cardinal points, and the discovery, under the buttress (or bench?) at its western corner, of three pottery beakers, one of which is illustrated on Plate CXLV, Fig. 397. All these features point to a public rather than private character for this building, and it might also be suspected that a religious function had been attached to it, although on purely architectural grounds such a surmise would be completely unwarranted. We may, however, anticipate here the conclusion reached in Chapter II (p. 60), namely, that a tomb (No. 107) lay directly underneath this building (cf. Plate XXII). With this added information, the reason for the unusual details of this structure becomes clear, for it is now obvious that the building was erected as a shrine over the location of the tomb, and that its formal plan and architectural features such as niches result from its sacred character. Moreover, the metre-thick pavement, which would be inexplicable without knowledge of the underlying tomb, is now easily accounted for

¹⁰ This wall was partially destroyed by the shaft of Tomb 124 from Stratum IX; cf. Plate XXII, and Chapter II, p. 59.

as a means of preventing the desecration of the holy soil beneath the building. This Shrine ranks with the Temple as the most important building of Stratum X, and is unique as the only Gawra shrine yet discovered that had been erected to honor and protect a burial.

Two large houses were located in the eastern sector, forming the southeastern side of a broad street leading to the Temple. One of these, composed of two large rooms (Nos. 1079 and 1080), lay immediately adjacent to the eastern corner of the Temple. Since the entrance to the Temple seems to have been at the southeastern end of that edifice, it is necessary to presume that the house formed of Rooms 1079 and 1080 was a later construction, built when the Temple had fallen into disuse, or when it was already in ruins. The second house, formed of Rooms 1084, 1085, 1087, and 1089, was adjacent to the first and lay east of it. The interesting feature of this structure is the fact that it displays numerous points of similarity to the larger building lying on the southwestern edge of the mound in Squares 10-11, K-M. These buildings have almost identical ground plans, with long and short rooms flanking a central chamber, but what is even more remarkable, the southeastern end of the present building is terminated by the same angled wall (though less oblique) that was so characteristic of its larger and more heavily built counterpart. Two additional points of similarity may be mentioned. Although, curiously enough, the present building has no doorway, the northwestern end has the same recessed, central bay that characterized the front of the structure on the southern edge of the mound. Furthermore, the side chambers of both buildings are entered through doorways having short flanking walls. Dissimilarities between the two are represented by the absence of niches of any kind in the present structure; by its thinner walls; and by its lack of a side wing such as was formed by Room 1080. Basically, however, the two buildings followed the same plan. Since the southern structure is the better constructed, and seems to illustrate the full architectural model, the eastern building may be a later imitation which, like the building adjoining it to the west, may have been built during the decline, or after the abandonment, of the Temple.

A few details of the Stratum X settlement require description before we pass on to the underlying stratum of X-A. The ubiquitous ovens of Stratum X, which testify to the secular nature of many of its buildings, were usually of the beehive shape found in later strata, and probably were used for baking bread. Often accompanying these ovens were mortars of pressed clay, sunk into the floors of the kitchens. A few ovens of another type were also found, which were much larger than those of the bee-hive type, and may possibly have been used in the manufacture of pottery. These have walls of stacked *libn* bricks in a hemispherical or conical shape, and possess arched openings (Plate XXXIa).¹¹

In regard to the building materials employed in Stratum X, most walls are constructed of the usual brown or reddish-brown mud bricks. An uncommon brick made of gray clay was, however, used to form all or part of the walls forming Rooms 1028-1032, 1035, and 1045-1047. The bricks, whether brown or gray, were of a wide variety of sizes, ranging from 50 x 25 x 11cm. to 46 x 21 x 10cm., and included such sizes as 50 x 23 and 48 x 22cm. (cf. Chapter II, p. 61). The walls of many of the Stratum X buildings, particularly the poorer private houses, are often thin and inferior in quality to those of upper strata. Moreover, the northeastern wall of Rooms 1031 and 1035 was constructed of *pisé*, or pressed clay, rather than the more usual *libn* bricks. Stone was more widely used than in later strata but, as in Stratum IX, was never employed as foundation material. Paving stones were found in many parts of the streets of the Stratum X community, while small pebbles and boulders were sometimes found singly in *libn* walls.

Stratum X-A (Plate IV). This settlement is almost completely devoid of architectural interest. Lacking the religious edifices of Stratum X and still later communities it is, moreover, without a single large secular or public building such as distinguished succeeding occupations; instead, the site is now occupied by a small and crowded collection of unimportant, shapeless houses. Not only were the contemporary builders unable to rival the quality of

¹¹ *RASOR*, 51, p. 24. Fig. 6, *ibid.*, is incorrectly captioned, the oven having been discovered in Stratum X.

Stratum X architecture, but the population must have been much smaller as well, for apparently only half of the slightly larger area available to the inhabitants of Stratum X-A was utilized.¹²

It is, consequently, difficult to see how the far superior skill of the builders of Stratum X had its origin in the diminutive, poverty-stricken village which preceded it. However, since the still earlier settlement of XI may be considered a worthy rival of Stratum X in architectural accomplishment, it becomes clear that the present settlement can represent only a transitional occupation, which spanned an interval when the civilization of Gawra had sharply declined. This cultural lapse cannot have lasted a long time, for the signs of age that were so common in Stratum X (such as ruined buildings, blocked doorways, and extensions and revisions of existing structures) are absent in the structures of Stratum X-A.

With such paucity of evidence, Stratum X-A could scarcely be expected to provide architectural bonds of union with overlying levels. To be sure, the pottery and other products of the inhabitants of X-A furnish reassuring proof that, in material culture at least, Strata IX, X, and X-A (as well as earlier occupations) all shared a common civilization. The meager contemporary constructions not only provide a measure of confirmation of this fact in the form of rooms which were part of the occupations of both X-A and X, but—more significantly—supply architectural connections with the underlying stratum. Stratum X-A is thus firmly united with both XI and X, and all four strata of IX, X, X-A and XI are linked together into a single stratigraphic unit, thus justifying the present grouping.

The connections with Stratum X referred to in the preceding paragraph are to be found in Squares 7 and 8, O and Q, where the walls of the few rooms in this sector had been extant in both X-A and X. It is no coincidence that these walls (form-

ing Rooms 1029-1032) were the only ones in Stratum X to have been constructed of gray *libn* (p. 12), so that there can be no doubt that they represent survivals from the underlying level, since X-A is the first occupation in which gray, rather than brown, mud-bricks were commonly employed. On the other hand, the architectural connections uniting Strata X-A and XI are represented by walls located in Squares 4-K and 5-K (Rooms 3 and 4). These must have been built immediately after the abandonment of Stratum XI, or after the collapse of the XI Temple towards the end of that stratum, for their construction resulted in the destruction of some parts of the underlying Temple. They were, however, used throughout the period represented by X-A, for although they are unconnected with other structures of the present level, their elevations are identical with those of adjacent X-A buildings. That these walls cannot be regarded as simply intrusive into XI is demonstrated by the fact that they appear to form part of the complex of rooms occupying the area to the rear of the Stratum XI Temple (cf. Plate V) which were constructed after the collapse of the front of that edifice (cf. p. 17).

The conclusion reached in an earlier paragraph, namely, that the occupational layer of X-A cannot have represented a long period of time, is thus borne out by the present evidence; for no walls constructed entirely of mud-brick could have survived through Strata XI and X-A, or through X-A and X, if the present stratum had not been of short duration.

Few of the individual buildings in the settlement require description. Most of the houses of X-A have no coherent ground plans or formal room arrangements, and scraps of walls are more common than rooms in the eastern and western sectors. Some of these wall fragments may have had functions connected with domestic tasks, while others may have been storage bins, or even pens for cattle. Still others may have arrived at their fragmentary state through the excavation of the shafts of later tombs and graves, as for example, in Squares 4-M, 5-M, and 6-M (cf. Plate XXII). Access to the top of the mound in this period may have been gained at the southeastern edge, where there was a small plaza in Squares 6 and 7, J and G. If so, the small but

¹² Although the southern to western half of the mound was unexcavated in Stratum X-A, the sounding trench referred to earlier on p. 3 was excavated in this level from Square 8-M to the southwestern edge of the mound. As no buildings and only a very few unconnected wall fragments dating to X-A were uncovered in this trench, it can only be surmised that this half of the mound was unoccupied, or only sparsely settled at this time.

thick-walled complex (Nos. 34-38) may have been a tower guarding the gateway into the settlement (Area 32) precisely as in Strata XI and XI-A. There are, however, no other indications of the town's defenses.

In Squares 6-M and 7-M are two rooms (Nos. 20 and 21) which have a more formal plan than any others in the stratum. The larger of these, Room 20, is entered through a small vestibule, Room 21, while a secondary entrance lies near its western corner. The door in the southwestern wall of Room 20 may indicate that originally the areas marked 50, 52, and 53 were part of this compound. If so, the oven as well as the walls enclosing the oven lying within this larger enclosure may be later constructions after the complex had lost its original function. What that function was is now a matter for speculation, but the shafts of two tombs and two graves had been dug within Rooms 20 and 21 (pp. 56; 100-01). This is certainly an indication that this building possessed some importance, but whether it was the residence of some person of high social position or whether the structure had been used, in the absence of a formal temple, for the performance of religious rites is now impossible to determine.

Stratum XI (Plates V, XXXI.b, XXXII, XXXIII.a). The excavations in this occupational layer, as in Stratum X-A and in levels below XI (cf. Introduction, p. 2), were restricted to the northern and eastern sectors of Gawra. Owing to the progressive expansion of the lower slopes of the mound in consequence of its conical shape, however, this concentration of activities did not result in a considerably smaller excavated area, as compared with the completely investigated strata of X, IX, and subsequent levels. In fact, the 55 x 60m. segment of Stratum XI that was explored may be compared to the 55 x 75m. dimensions of the entire Stratum X settlement, and the 50 x 75m. size of Stratum VIII-C. In addition, a ten-metre wide sounding trench was excavated through the remaining half of the mound in the present stratum, as in Stratum X-A, which disclosed no building remains in the area from Square 8-M to Square 12-M on the southwestern edge. It is possible, however, that some contemporary buildings are still to be

found in the areas on either side of the trench, and particularly in the southern quarter, where there is a larger unexcavated region than at the west. If so, the present settlement may have rivaled that of Stratum X in size and population, if it did not actually exceed it.

The character of the two occupations is also similar, for in contrast to the completely secular occupation of X-A, Stratum XI possessed a formal Temple as well as a massively built, well-planned building on its northern outskirts. The presence in the Stratum XI occupation of numerous streets and passages also duplicates a feature of Stratum X. The main passage through the present level starts at Area 25 (Square 6-J) on the southeast edge of the mound, where it may have connected with a path leading down the southern slopes of Gawra. This passage then extended northwest to Areas 39 and 40, where there appears to have been a cross-street connecting the region southwest of Area 37 with Areas 42 and 43 (Squares 7-K to 4-M). The main passage, however, continued from Area 39 northwestwards until it terminated in Areas 94 and 95 (Square 6-Q) of the northwestern sector. Both the main and cross streets were intermittently paved with stones, which are otherwise uncommon in Stratum XI.

More important than these broad resemblances between Strata XI and X, however, are the architectural similarities between the Stratum XI Temple and those of Strata IX and VIII. The Temple of XI was square, measuring 9.75m. in both length and breadth. It lay on the eastern edge of the mound in Squares 4-J and 4-K where, at the time, the flat, habitable top of the tepe must have extended further to the east. This is proved by the fact that later erosion of the slopes of the mound, or the collapse of what may have been an artificial extension, destroyed the entire eastern corner of the Temple, the extant edge of the mound passing through the doorway of that edifice to a point well past the middle of its southeastern wall (Plate XXXI.b). Fortunately, however, the remainder of the building was sufficiently well preserved to permit reconstruction of its ground plan, which fundamentally resembles those of the Western and Eastern Temples of Stratum VIII, as well as that

of the Stratum IX Temple. The architectural elements shared by all these structures include orientation of their corners to the cardinal points of the compass; a central doorway shielded by a three-sided court or porch; a large central chamber or sanctum; and two flanking rooms on each side of the sanctum. In addition, the present building has, like the Eastern Temple of VIII and the Stratum IX Temple, a podium made of clay and cement lying close to the entrance of the edifice. This measured 2.20 x 1.80m.; it had an irregular, roughly rectangular outline, and was raised about three centimetres above the pavement of the sanctum (Plate XXXI.b). The podium itself was not marked by burning, but the pavement of the sanctum at the north edge of the podium bore clear traces of fire.

These similarities prove that a common architectural tradition was shared by the builders of Strata XI through VIII. But there are in the present edifice some noteworthy differences as to plan and architectural detail. First, the present Temple lacks the numerous niches so characteristic of the later religious buildings. To be sure, a wide recess occurs in the exterior face of the wall forming the rear of the XI Temple, but this is a simple recess rather than the more common and much more effective double-recessed niches found on the later temples. Second, there is an important alteration of ground plan in the Stratum XI Temple as compared to its successors. In the Temples of X, IX, and VIII the central room or sanctum extends from the entrance to the rear wall. Here, however, the central chamber has been shortened by the addition of two walls projecting from opposite sides of its southwestern end. These wall projections are too short to enable one to describe the space thus cut off as a room (Plate XXXI.b), and it may have been the intention of the builders to mark off a kind of chancel. More probably, however, these walls may have been designed to conceal the doorways into the small corner rooms (Nos. 2 and 6) at the rear of the building. Traces of red plaster were found on the sides of these walls facing the front of the Temple. Third, although two rooms flank each side of the sanctum, these are now of disparate sizes, those at the rear of the Temple being much

smaller than the two at the front.¹³ Furthermore, the flanking rooms (on the preserved southeastern side at least) communicate with one another, this feature being duplicated only in the Eastern Temple of Stratum VIII. Fourth, the interior surface of the rear wall of the Temple was featured by a shallow niche, one metre wide, set into the wall about thirty centimetres above the floor. It was entirely covered with white plaster, which contrasted with the red surfaces of the wall projections flanking the doorways into Rooms 2 and 6. The prominent position of this niche, which faced the podium and entrance at the other end of the building, and the fact that it was white-plastered, suggest that it may have held a cult object when the Temple was in use, although no trace of such an object was found. The only parallels to this niche were in the Shrine (Room 1003) of Stratum X, and in the Northern Temple of VIII, whose southwest wall was featured by two similar recesses.¹⁴ Finally, we may note the remarkable attraction for both tombs and graves possessed by this Temple. Fifty-four such burials were discovered below the environs of this edifice, or beneath its floors and foundations; this is by far the largest number of burials associated with any single structure of Gawra (cf. Plate XXIII and Table E, p. 123). They are described in Chapters II and III.

The largest structure of the present stratum was located in Squares 5-Q and 6-Q, on the northern edge of the mound (Rooms 58-63). This was square, measuring 11.50m. in both length and breadth. Not merely in size, however, was it distinguished from other buildings. It was, unfortunately, discovered in a ruined condition, the northern walls in particular having been completely destroyed, perhaps because of their proximity to the edge of the mound. It is consequently impossible to reconstruct the entire ground plan, but the front of the building, which was the best preserved, contained several interesting features. The middle

¹³ Room 2 contained a number of seal impressions which were either fragmentary or bore indistinct designs and are, consequently, unillustrated. This circumstance recalls the seal impressions discovered in Room 902 of the Stratum IX Temple.

¹⁴ *TG.*, Plate XI; cf. also the niches in Rooms 26 and 42 of Stratum XII.

of this wall had a single, wide recess, and this recessed section, or bay, was broken by a double door which undoubtedly formed the main entrance to the building (Plate XXXII.a). The architectural idea is thus not unlike that expressed in the temples, where the entrance is, however, located within a deeper *linân* or open court, but an even closer parallel to this feature may be found in the large structure situated in the southern part of the Stratum X settlement (Squares 10-11, K-M). Inside the present Stratum XI building was a small square room on each side of the doorways (Nos. 61 and 63). Only the walls of Room 63 were extant, however, this enclosure having a door (which was later blocked; cf. Plate XXXII.b) opening into what must have been a large central hall (Room 62). At the rear of this hall was a small asymmetrical room (No. 59), which was connected with another (No. 58). The southern wall of Room 58 is missing in part, but its middle section seems to have projected out from the line of the same wall at the southern and eastern corners of the building. If so, the ground plan must have been curiously like that of a much earlier structure, namely, the small house lying in Square 5-G of Stratum XV (cf. Plate XV, Rooms 3-9).

There are other details of interest in this building. Its walls are thick, almost massive, having at some points a breadth of one metre. The interior wall surfaces, at least at the front of the structure, were coated with a thick red plaster. Room 61, at the western corner, was floored with wattles or reeds (Plate XXXIII.a). Room 63, forming the southern corner, contained over a score of large clay sling pellets of ovoid shape, while more than fifty additional specimens were found in Room 62. Neither these details nor the plan of the building suggests that it possessed a religious function, although the Stratum XI-A Temple lay directly underneath, and although nineteen graves were discovered which had been associated with it (Chapter III, Table E). Indeed it is more probable that it was either the residence of a leading member of the Stratum XI community, or else served as a citadel or watch-tower. Favoring the latter interpretation are the sling pellets in Rooms 62 and 63, and the

heavy construction of the walls of the building. Its isolated position may also be significant, the surrounding dwellings having been carefully separated from it, except for Rooms 64 and 65 which are contiguous and may be later constructions. Finally, it is interesting to note that in Stratum XI-A a watch-tower existed in the adjoining squares of 4-O and 4-Q, while the curved street of Stratum XIII also terminated in Square 4-Q.

All these circumstances suggest that one of the main means of access to the settlements of Strata XI, XI-A, and XII lay on the northern and western slopes of Gawra. Such a path may have led—in Stratum XI times at least—from the western base of the mound, up the gradual northwestern slopes to Square 6-Q, in front of the building just described. The heavy construction of Rooms 98, 99, 102, and 103 in Square 7-Q, on the northwestern edge of the mound, may be an indication that this complex was another XI building having a defensive function, although there is no other evidence to support this theory. The main street of XI, which was described in an earlier paragraph, had a northwest-southeast orientation, and at the northwest terminated between the thick-walled building in Square 5-Q and the thick-walled complex of rooms in Square 7-Q. Consequently, it is possible that both structures, or at least the Square 5-Q building, were intended to protect this gateway to the settlement, while at the southeastern end of the street in Square 6-J there was another strongly built set of walls (Rooms 27 and 28) originally constructed in Stratum XI-A which survived into XI. That building seems to have guarded the southern approaches to Gawra, and will be described with other Stratum XI-A constructions in the following section.

None of the remaining structures of Stratum XI requires individual comment. All were, apparently, the private dwellings of inhabitants of the mound, as shown by their flimsy construction and undistinguished architecture. Cooking and pottery ovens are common, and are concentrated in the northwestern and southeastern sectors. Their presence in the latter area is surprising, since four of them are situated directly to the rear of the Temple, the

walls enclosing the ovens in some cases being joined up with the rear wall of that edifice. As such a practice could scarcely have been tolerated if the Temple had still been in use, we must assume that the area to its rear had been kept open only when that structure still possessed its religious function. With the collapse and desertion of the Temple, the inhabitants of Stratum XI doubtless felt free to utilize this desirable area, and the walls and ovens of Rooms 12-24 were then constructed. This explanation finds corroboration in the elevations of the same complex, for the pavements here are from fifty centimetres to one metre higher than the floors of Rooms 27-35 which lie directly to the southwest, and in fact are higher than any other Stratum XI floors except those of the Temple itself. Furthermore, Square 5-J was selected for the site of many contemporary tomb shafts, which could only have been dug there when that area had been free of all walls and oven (cf. Plate XXIII, and Chapter II, p. 66). In fact, it is possible that it was the earth that remained after these shafts had been filled in which accounts for the higher elevations of Rooms 12-24.

That the Temple had been abandoned some time before the stratum itself came to an end finds almost certain proof in the walls which were constructed upon its ruins. One of these forms the southeast wall of Room 19, and is clearly superimposed on the southern corner of the Temple. A more extensive group of walls, which apparently formed two rectangular rooms (Nos. 6 and 7) east of Room 12 was, moreover, built over the Temple, resulting in the destruction of its western corner. These may represent the latest constructions of Stratum XI, for the elevations of their pavements (Plate IV) show that they were even higher than the workrooms of Square 5-J. More significantly, they continued in use in Stratum X-A, and it is this fact more than any other which demonstrates that only the briefest interlude can have separated Stratum XI from Stratum X-A.

Rooms 27 and 28 have already been mentioned as Stratum XI-A constructions that survived into XI. Other old walls which were used again in XI may be seen in Squares 7-K and 7-M. The pave-

ments here are among the lowest in the settlement, and the walls seem originally to have formed part of the interior divisions of the Round House (p. 20). Conversely, the rooms to the northeast (Nos. 48, 52, and 55) have higher floors than other XI buildings, except those on the eastern edge of the mound; in fact, the pavements of Rooms 48, 52, and 55 are separated by an unusually deep amount of débris (more than 1.50m.) from the underlying floors of XI-A. An explanation of this circumstance will be suggested in the description of Stratum XI-A which follows below.

The sun-baked mud-bricks employed by the builders of Stratum XI were, as in X-A, more commonly made of gray clay than of brown, except in Square 5-J where constant firing of the ovens turned the surrounding brickwork into warm brown colors. The bricks were usually 47 to 52cm. in length, while a few measuring 54cm. were also noted. The latter are among the largest mud-bricks yet discovered at Gawra. The widths of these units ranged from 23 to 26cm., and from 11 to 13cm. in thickness. Stone, in the form of slabs and small boulders, was a common paving material and was often found used as thresholds (Rooms 23, 24, 51 and 71). It was never used, however, as a construction material.

B. STRATUM XI-A

(PLATES VI, VII, XXXIII.b, XXXIV, XXXV)

The occupation of XI-A was dominated by a large building of massive construction and circular plan, situated slightly northeast of the mound's center. This unique structure, called the Round House by its excavators, is the outstanding architectural product of this level, and effectively segregates XI-A from other strata in an architectural sense; this stratum thus standing by itself. It must not be assumed, however, that XI-A is wholly distinct from the four levels just described which compose our first group of architecturally related strata. Interrelationships are to be found in certain walls and buildings which, although constructed in XI-A continued in use in XI, and in the religious tradition of Gawra as illustrated by its temples. Although of secondary importance compared to the Round

House, Stratum XI-A possessed a sanctuary resembling those of XI, X, IX, and VIII: hence those levels, together with Stratum X-A, must be regarded as representing a single cultural period. The separation of Stratum XI-A from its successors, therefore, results from the appearance in that level of a unique and predominant architectural product, but does not reflect any profound change in civilization.

As in Strata X-A and XI, excavations in the present stratum were confined to the northern and eastern sectors of the mound, except for an extension to the southwest in Squares 7 and 8, K to O, necessitated by the location of the Round House. Later, the sounding mentioned in the descriptions of Strata X-A and XI was extended from Square 8-M to 11-M of XI-A without exposing any contemporary building remains. In this manner nearly one-half of the total area of the mound at the level of Stratum XI-A was investigated, these incomplete excavations disclosing that the settlement covered an area measuring 60 x 60m. at the minimum. Apparently the compact groups of buildings occupying the central, northern, and eastern sectors represent the main portion of the XI-A settlement, but the unexplored southern and western quarters contain, in all likelihood, many additional contemporary structures.

The striking feature of Stratum XI-A, when considered in its entirety, is the fact that it was a fortified town rather than a peaceful agricultural and religious center, as in Strata X-A, X, IX, and still later times. There was, to be sure, a formal Temple, but that building was smaller than later religious edifices, and was not granted the choice locations of the Temples in Strata XI, X, and IX. Large private houses, which may have been the residences of eminent persons within the community, also distinguished Stratum XI-A, but they too were subordinated, being surrounded by less pretentious buildings. The architects and builders of XI-A gave much more consideration to the methods by which the town could be defended than to any other matters; hence the outstanding structures are watchtowers on opposite edges of the settlement connected by a street, as in Stratum XI; and a strong inner citadel, the Round House. Moreover,

the buildings facing the edge of the mound in the eastern sector were constructed so that they presented a common echeloned front, or city wall, to possible attackers mounting the vulnerable south-eastern and eastern slopes of the mound.

These extensive precautions furnish some insight into contemporary times. We may anticipate here the conclusions reached in subsequent chapters, where it will be shown that the long period characterized by monochrome painted pottery came to an end with the destruction of the underlying occupational layer of XII. In Stratum XI-A too, the tomb type of burial is first introduced, and certain technological changes, tentatively introduced in Strata XIII and XII, now become firmly established. All these factors show that when XI-A was founded a new culture was ushered in, consisting of some elements of the older civilization amalgamated with a larger number of cultural innovations. The sudden introduction at this time of new products and new ideas, perhaps by migrating peoples, seems to have been resisted, and the ensuing period of conflict is thus reflected in the defensive constructions of Stratum XI-A, as well as those of XI.

The first defensive unit of Stratum XI-A to be described is located on the northern edge of the mound in Squares 4-O and 4-Q. The building situated there was formed of a large, nearly rectangular central chamber (Room 68) which had two pilasters decorating the exterior face of its southwestern wall. These may have been added to decorate the lower end of the court (Area 74) in front of the Temple (Rooms 75-78) which will be described below. Flanking this central room were two smaller rooms on the northwest (Nos. 69 and 70), and three on the southeast (Nos. 65-67). Room 65 seems to have been the entrance to the building, but no other doorways on this side of the structure have been preserved. Rooms 62 to 64 are probably later additions, but it is possible that Room 64 was part of the original complex. The wall facing the northern edge of the mound is double the thickness of the others, and may have extended considerably further northwest, perhaps enclosing most of Area 71, for it is reasonably certain that the contour of the mound in Stratum XI-A times extended into Squares 4-S and 5-S (cf. Chapter III, p. 102). Be-

tween this thick wall and the extant edge of the mound was a mud-brick pavement, two courses thick, covering most of Area 58.

The heavy construction of the walls of the present building and that of the wall in Square 3-O, together with the brick pavement in Area 58, suggest that a path up the western and northern slopes of the mound reached the settlement in Squares 4-Q or 4-O; the narrow passage numbered 59 on the plan may thus have served as the gateway to the compound. A similar gateway seems to have existed in Square 6-Q of Stratum XI (p. 16), and in Square 4-Q of Stratum XII (p. 27), all in the same general sector. Consequently the building now being discussed (Rooms 65-70) was, in all likelihood, a watchtower guarding this northern gate; in this regard it is not without significance that a quantity of clay sling pellets was discovered in Rooms 66 and 68, as well as a large number of pottery bowls in the former room. One of the latter is shown on Plate CXLI, Fig. 340.

This explanation of the constructions on the northern edge of XI-A is strengthened by an additional analogy between the plans of Strata XI-A and XI. The present stratum, like XI, was featured by a street which bisected the settlement. This street in XI-A is not apparent if the plan is only casually examined, because it was partially blocked by later walls in Squares 5-K and 5-J. Nevertheless, although it had a slightly different orientation than in the succeeding occupation, it was intended (as in Stratum XI) to connect the two main gateways to the settlement. Specifically, the Stratum XI-A street extends from the brick pavement in Area 58 which was dominated by the watchtower just described, through the town gate in Area 59, and through Area 55. It then continued in a southerly direction across the western edge of Area 50-A, and through Squares 5-K and 5-J in the sector later occupied by Rooms 49, 106, 107, and 154. These rooms definitely belong to a late phase of XI-A, as shown by the fact that the walls of Rooms 106 and 107, for example, were constructed against the earlier walls of Rooms 105, 109, 48, 44, 40, and 43, and are not bonded into them. Moreover, it should be noted that Rooms 48, 44, 40, 43, 156, 155, and 158 have their western walls aligned so as to present a single

straight wall to this street, which thus led to the southeastern gateway and watchtower in Squares 6-J and 6-G.

The watchtower on the southeastern edge of the mound is composed of Rooms 1-10 and 12, which are characterized by even more solid walls than those which formed its northern counterpart. Little can be said regarding the plan of this structure as it is incompletely excavated, the walls of Rooms 1-3 terminating at the scarp formed by the excavations in this sector.¹⁵ Yet this complex seems to have formed another unit in the town's defenses, and was undoubtedly a watchtower similar to that on the northern edge. This interpretation is favored by the paving stones lying in the narrow space of Area 11, which suggest that they formed the crest of a road leading up the southern slopes of Gawra. On this southern side, ascent to the top of the mound could be made on an easy gradient (Plate I), and this fact undoubtedly accounts for the strength of the fortifications here,¹⁶ for not only is there the watchtower to guard the gateway, but the walls of the houses facing the eastern fringe of the mound were constructed to form a single echeloned town wall.

A mere glance at the Stratum XI-A plan would lead one to assume that no gateway existed in this southeastern sector, unless the path from the southern foot of the mound skirted the city wall just mentioned, in Squares 5-G, 4-J, and 3-K, to reach the plaza of 50-A. This route may indeed have been employed, but there are indications that a proper gateway existed in early XI-A times at the rear of the watchtower. That tower seems originally to have been composed only of Rooms 1-3, Rooms 4-10 and 12 apparently having been added later, for

¹⁵ The well in Square 7-J was sunk from Stratum VIII-B₁ TG., 32.

¹⁶ Cf. Frontispiece and Plate XXVIIIa; also the contour map of Gawra, TG., Plate I. It is interesting to recall that in Stratum X-A a town gate seems to have existed on the same southeastern edge, in Square 6-J, guarded by what may have been a tower in Squares 7-J and 8-J (see above, pp. 13-14). But an even closer analogy is provided by the much later stratum of VI, where there were gateways on the southern and eastern edges of the mound (TG., Plate VII, and pp. 18-20); and where, on the southeastern slopes, the approaches to the Stratum VI settlement were discovered. Cf. *BASOR.*, 65, p. 2.

the walls of the latter enclosures are not bonded into the straight northwest-southeast wall of Rooms 1-3. Prior to the addition of Rooms 4-10 and 12, the gateway seems to have been in their location, and it was undoubtedly because of this later obstruction that the straight part of the main street in Squares 6-J, 5-J, and 5-K leading to the gate was also blocked. Why these important alterations in town-planning were necessary is problematical, but there can be no doubt that Stratum XI-A, as originally planned, was easily defensible.

Not content with having fortified the approaches to their homes, the inhabitants of Stratum XI-A finally constructed an inner citadel. That extraordinary building—the Round House—lay close to the center of the mound, occupying all of Square 7-M, as well as portions of all adjoining squares. The many features of this building, such as its circular ground-plan, massive walls, single ramp-protected entrance, and central position easily make it the outstanding architectural achievement of XI-A, and also permit no doubts as to its military character. If further confirmation of the nature of this building is, however, required it is supplied by the numerous celts, mace-heads, and hammer-stones found within it, which were presumably to have been employed in its defense.¹⁷

Before proceeding to a detailed description of the Round House, the semi-isolated position of the building should be noted. Except at the south and southwest where the thin walls of a few private houses (Rooms 118-130) were constructed contiguous to the larger building, the Round House is unconnected with any other Stratum XI-A buildings or walls. While we should expect the areas around a fortress to have been kept clear, this fact at the same time appears to present an important stratigraphic problem, for there is no unambiguous proof, such as would have been provided by direct connections with buildings demonstrably of XI-A origin, that the Round House does indeed belong

to that stratum.¹⁸ There is, however, ample justification for attributing it to Stratum XI-A. It is difficult to relate the Round House to the succeeding stratum, i. e., XI, for numerous XI walls cross over the curved main wall. Nevertheless some of the inner dividing walls of the Round House seem to have survived into XI, particularly those of Rooms Q, M, and N, and the northeast-southwest wall separating Rooms P and O, and F and E. These walls are almost identically located in both XI-A and XI (in the latter level they form Rooms 73, 76, 79, 80 and 83), so that they must represent original constructions of XI-A which were used again in the succeeding layer. This fact must be regarded as proof that the Round House is not later than XI-A, although it may also suggest that the structure belongs to a late phase of XI-A. In this connection, it is significant that the floors of the Stratum XI rooms lying directly above the center of the Round House (Rooms 72, 73, and 76-88 of Stratum XI) are from 30 to 75cm. lower than adjoining Stratum XI rooms to the north and northeast. The implication seems to be that when the Round House was destroyed, at the very end of the period represented by Stratum XI-A, portions of the thick main wall fell outward, exposing the room walls inside the structure. These were then utilized in Stratum XI, whose construction would thus seem to have begun immediately afterwards. At the same time the debris of the main wall of the Round House thus formed an elevation in Squares 6-O, 6-M, and 6-K resulting in higher pavements of the Stratum XI rooms occupying that area.¹⁹

Since the Round House antedated the construction of Stratum XI, the only remaining possibility, therefore, is that it was a part of Stratum XII. A

¹⁸ Cf. *BASOR.*, 62, p. 9, and *ibid.*, 64, p. 5, where the stratigraphic problem presented by the Round House is discussed. See also *ibid.*, 66, p. 19, where Speiser states his opinion that the Round House formed part of Stratum XI-A.

¹⁹ The Stratum XI-A southeastern tower (Rooms 1-10 and 12) also survived into Stratum XI (Plate V, Rooms 27 and 28). This connection, and that provided by the walls of the Round House described above, indicate that Stratum XI closely followed XI-A, and that, as a consequence, Strata XI-A through VIII represent an uninterrupted chronological period.

¹⁷ These, as well as three spindle whorls from the same building are unillustrated. Other objects from the Round House include a pottery bowl (Plate CXLI, Fig. 135), three seal impressions (Plate CLXVIII, Fig. 154, and Plate CLXIX, Figs. 161 and 166), and the interesting set of terra cotta gaming pieces found in Room K, and illustrated on Plate LXXXIV.a.

serious difference in floor elevation would have to be explained, however, if a Stratum XII date for the Round House is argued, for the floors of that unique structure lay over one metre above the floors of buildings definitely belonging to Stratum XII; in fact, they occur at almost the identical elevations of other XI-A rooms to the northeast. Additional indications that the Round House cannot have been part of Stratum XII become apparent if Plate VIII is consulted. On that plan, the position of the exterior wall of the Round House has been outlined to facilitate the present discussion, and it will be noted that a wall forming a three-sided enclosure lies in Squares 7-M and 7-O, beneath Rooms K and L of the Round House. That wall, which was exposed in the sounding trench extending to the southwestern edge of the mound, is unconnected with other structures, but on the basis of elevation its excavators could assign it only to Stratum XII. Consequently the Round House which lies over it must belong to the succeeding occupation, namely, XI-A.

One more clue is available. Although the pavements of the Round House lie well above the adjacent floors of Stratum XII, the walls of that level rise, near the location of the Round House, to a height of 8.17 to 8.20m. above the zero point, or only twenty to fifty centimetres below that circular building. As the Round House foundations extended at least that distance below its pavements, it is not surprising to observe on Plate VIII that the Stratum XII walls in Square 6-M which project towards it seem to have been cut by excavations for the Round House foundations. This fact can only be interpreted as proving the Round House to be later than Stratum XII; moreover, an examination of Plate XXXIV.a shows the outside wall of the Round House to have been superimposed on XII constructions (lower right and front).

All evidence, therefore, points to a conclusion that the Round House was constructed during the period represented by Stratum XI-A, but it is possible to fix even more precisely the relative date of its construction. The plan of Stratum XI-A shows that many walls of XI-A projecting towards the Round House terminate, as in Stratum XII,

before they reach that building. It is probable, therefore, that these walls were removed in ground-clearing operations by the builders of the Round House immediately prior to its construction. It is thus necessary to assume that the Round House is somewhat later than the XI-A walls and rooms to the east, and possibly later than all other buildings in the settlement. Two phases of Stratum XI-A are consequently indicated; the first represented by all structures of XI-A in the northern and eastern sectors, and a second represented only by the Round House and its contiguous rooms to the southeast and southwest. It may be, however, that the blocking of the straight street in Squares 5-J and 5-K, and the construction of Rooms 4-10 and 12 which occupied the site of an earlier town gateway, also took place in the second phase, about the time when the Round House was built. It will be possible to dwell upon this hypothesis when the Temple of XI-A is described, for that building appears to supply a small measure of proof that the constructions of XI-A are to be divided into early and late periods. For the present, however, we must first proceed to a description of the Round House itself.

The Round House is the largest structure yet discovered at Gawra (Plates VII and XXXIV.a). Having an outside diameter ranging from eighteen to nineteen metres, its exterior wall formed an almost perfect circle which was, however, open at the west (Square 8-M) where the only entrance to the building was situated. The circular exterior wall was uniformly a metre in thickness except in Square 7-O where there was a large pier or buttress nearly seven metres in length, at that point increasing the thickness of the main wall to nearly two metres. This pier possibly represents repair to a damaged or weakened section of the main wall, but it may also have had some connection with the entrance to the Round House, as will be discussed below. Elsewhere, the outer wall was formed of mud-bricks laid in three parallel rows as stretchers. These bricks measured from 50 to 56cm. in length, 26 to 28cm. in width, and were approximately 10cm. thick.

The entrance at the west was featured by a ramp of earth packed upon a foundation of stones

(Plate XXXV.b). This ramp descended into Room I, and its base in that room was nearly 2.50m. in breadth. Narrowing at the doorway to the Round House, it rose to a height of one metre above the floor level of Rooms I and J. No traces of this ramp could be discovered outside the entrance to the Round House, so that its connections could not be traced. Did it join the broad pier in Square 7-O, and does this pier thus represent part of a long ramp leading to an upper story? If so, how was access to the Round House itself gained, since the opening in the walls which must represent the entrance would then have been completely occupied by the ramp (Plates VII and XXXV.b)? Or, as the excavations seemed to show, was the ramp totally unconnected with the large exterior pier or buttress, and merely a means of connecting a high entrance with the interior of the Round House? Unfortunately, no answer to these questions could be discovered, but it is quite possible that, as a safeguard against attack, a small doorway to the Round House had been set high in a wall over the ramp. This doorway may have been reached, for example, by a ladder from the outside, which could have been withdrawn in case of attack, and the most vulnerable part of the building could then have been defended from the top of the ramp. But such speculations are futile, for the exterior wall of the Round House was preserved only to a height of 60 to 120cm., and in the destruction of its upper courses the answer to this, as well as to other questions, was irretrievably lost.

The interior of the Round House was divided into seventeen rooms of which six, lying in the middle of the building, were rectangular. The remaining eleven rooms share the curved exterior wall of the building, four of them being nearly triangular in plan (A, D, J and G). The central room (N) is the longest and largest. With Room I as its antechamber, and with Room B at its rear, it forms the axis of the building, to which the smaller enclosures on both sides were clearly subordinated. The emphasis placed on these central rooms hints that they possessed a special character, but what that may have been is not readily apparent. It has been suggested²⁰ that Rooms I, N,

and B represent a sanctuary, Room N being the cult chamber, entered through Room I, the antechamber, with Room B representing the cella. The long free-standing wall in Room N, under this explanation, would have been a platform, somewhat analogous to the *podia* of later temples. This interpretation is supported by the orientation of all rooms within the Round House, for their corners are aligned to the cardinal points of the compass like the temples of all levels so far described. But objections to this theory may also be adduced. The wall within Room N was too long and too narrow to have served as a platform; furthermore, it all but blocks the doorway into Room I, and extends almost the whole length of the room at a slight tangent. A similar, although shorter and higher wall stood in the center of Room I which cannot also have been a platform if that room had been merely an antechamber (Plate XXXV.a). Room H is likewise divided by a center wall which, however, is connected with the main wall of the building. The occurrence of center walls in three adjoining rooms thus makes it unlikely that one functioned as a platform, while the others had some other use. Undoubtedly all three were erected for the same purpose which, as a consequence, cannot be connected with cult practices, but whether they served as newel walls (which was doubted by the excavators of the building), or were later structural additions cannot now be determined.

As there are no other architectural details within Rooms I, N, and B that are duplicated in the Temples of XI-A, XI, or still later strata, it is impossible to present any clear proof that the Round House ever served as a combined fortress and temple. Moreover, we must note the absence of burials associated with the Round House. Only one grave was discovered beneath its floors (Locus 7-30 below Room I, at the entrance to the building). In view of the heavy concentrations of burials in and around the Temple of XI-A, and the Stratum XI Temple (Chapter III, Table E), many more graves could have been expected under Rooms I, N, and B if these had indeed formed the sanctuary of the Round House. Because of this negative evidence, we can only note the possibility that the central portion of the Round House may have pos-

²⁰ By Speiser, *EASOR*, 62, p. 12.

sessed a religious character, but it should be emphasized that at present there are no sure indications that the building was more than a remarkable military construction.

Turning now to other rooms of the Round House, we note that all possess central doorways excepting Rooms Q, J, I, and H. While these central doorways unquestionably reflect the desire for symmetry apparent in the arrangement of the rooms themselves, they may also have served a practical purpose. By breaking the walls in their centers, rather than where they abut on the main wall of the building, the door jambs joining up with the exterior wall thus had the effect of small buttresses, which strengthened the curved exterior wall. These abutments or buttresses were, moreover, in every case bonded into the main wall, a detail which further added to the support of the latter. If the roof of the Round House, which must have been flat, had possessed a parapet formed of the outside wall, these interior buttresses would have supported the walks directly behind such a rampart. While there is otherwise no factual basis for such an explanation of the central doorways of the rooms, it is interesting that the short buttresses or jambs bonded into the main wall occur at regularly spaced intervals. The wall projection in Room J can be described only as a buttress since it cannot be related to any doorway, while that between Rooms I and H was built at right angles to the main wall, but out of line with the doorway. Moreover, traces of a similar buttress were discovered in the center of the curved wall in Room A (Plate VII), so that their distribution may be described as remarkably regular.

Only one of the Round House rooms furnished definite clues as to its use. This was Room G, on whose walls were found carbonized kernels of grain, indicating that it had served as the granary of the citadel. Room E is interesting because of its secondary walls erected against the original ones. These exactly duplicate the earlier walls except that they block the doorway into Room F; in the wall fronting this doorway, however, a small rectangular window was cut only a few centimetres above the floor. Furthermore, the secondary walls do not cover the small niche cut into the center of the

original northwestern wall. Possibly the secondary walls were intended to strengthen an originally inferior construction, or they may have been a means of safeguarding the stores of grain in Room G, and perhaps other articles or provisions in Room F.

Before proceeding to a description of other important XI-A structures, some mention should be made of the rooms contiguous to the southern and southwestern portions of the Round House exterior wall. These shapeless, thin-walled structures are of no particular architectural significance, but their presence around the Round House cannot be ignored. Like the Round House itself, they fail to link up with other Stratum XI-A walls, particularly to the east, and since they cannot have added to the efficiency of the Round House's defenses they must consequently represent constructions of the final phase of Stratum XI-A prior to the destruction of the citadel, or just after its abandonment. At any rate, the floor levels of these contiguous rooms are from sixty to ninety centimetres higher than adjoining pavements; in fact they are among the highest of the entire occupation.

The northern sector of Stratum XI-A was almost completely devoid of private dwellings. Undoubtedly this was due to the presence of a watch-tower in Squares 4-O and 4-Q described above, and a Temple in Squares 5-Q and 6-Q. The Temple, formed of Rooms 75-78 (Plate XXXIII.b), had undergone alteration after its abandonment as a religious edifice, and was subsequently partially destroyed by the nineteen graves dug from within and around the overlying thick-walled building of Stratum XI (Chapter III, p. 101). Nevertheless, it is possible to recognize in its ruins many of the details of architectural formality present in later sanctuaries which, together with the alignment of its corners to the points of the compass, prove its religious nature.

This Temple is the smallest religious edifice of Strata IX—XI-A, excluding only the Shrine (Room 1003) of Stratum X. Like the Stratum XI Temple, it seems to have been almost square, measuring about 8.40 x 8.25m. These dimensions are to be compared with the 13.00 x 11.40m. size of the Stratum IX Temple (without its extension), the

12.30 x 11.15m. measurements of the Temple of Stratum X, and the 9.75 x 9.75m. dimensions of the Stratum XI Temple. The Stratum XI-A sanctuary was entered from a large plaza (Area 74) through an entrance court or porch. Room 76 represents the central chamber or sanctum; this did not possess a podium. On the southeast side of the edifice, fragments of the walls of two ancillary rooms have been preserved (Nos. 77 and 78), and it may be assumed that similar rooms existed on the northwest side (Area 75). The exterior surface of the rear wall has a wide recess behind the sanctum, exactly as in the Stratum XI Temple. All other architectural details likewise find parallels in later Temples, and the religious nature of this building is assured by the locations of twenty graves and a single tomb whose shafts had been dug from within the sanctuary, or from surrounding areas (cf. Plate XXIII; Chapter II, p. 67; and Chapter III, p. 102).

The seemingly asymmetrical shape of the edifice was caused by a realignment of its southeastern wall, which undoubtedly occurred when the oven outside Room 78, and the walls of Rooms 80 and 81, were constructed. We may also surmise that the walls of Rooms 82-85 to the east were added at the same time, for these effectively block passage from the main body of private dwellings to the southeast.

The desecration of the Temple by alterations of its southeastern section, and by the blocking off of the open plaza in front of that building are certain indications that, like the Temples of XI and X, it had failed to survive the full period represented by contemporary structures. Whether this was due to structural deficiencies of the Temple itself, or was the result of a change in religious thought and practice is not known. If, however, the Round House belongs to a late phase of XI-A, and if that remarkable structure was indeed a combined fortress and temple as discussed above, it may have been that religious worship was transferred to the Round House, and the original Temple abandoned, for some reason not readily determined now.

To pass on to other outstanding structures, our description of Stratum XI-A may be completed with an examination of two large private houses.

The first of these is the shapeless building formed by Rooms 89-91 and 97-104, lying in Squares 5-M and 6-M, close to the northeastern part of the Round House. The size of this building is surpassed only by that of the Round House, but its extremely irregular ground plan and the presence of two ovens within the structure testify to its secular nature. It is surprising, therefore, that seventeen graves were associated with it, fourteen of which lay beneath its northwestern half (Chapter III, p. 102).

The building composed of Rooms 39-45 lying in Squares 5-J and 5-K has a more pleasing regularity. That almost square structure, measuring 6.85 x 6.50m., lay on the narrow street leading to the southeastern town gate, and was featured by a white-plastered central chamber or court (Room 40) which extended the full width of the building. On each side of this central chamber were three small square ancillary rooms. Rooms 46-48 on the northern side were not part of the original plan, for their walls were not bonded into Rooms 39, 44, and 45 of the main building. With a broad niche in the middle of both the front and back walls, the plan of this edifice shows some similarity to that of the Temples of XI-A and XI, and the formality of the room arrangement was emphasized by the balanced doorways on both sides of the central chamber. Entrance, however, was effected through Rooms 39 and 46 into the side of the central chamber instead of through a front court or porch. Furthermore, the building presented its sides, rather than its corners, to the cardinal points of the compass, and was closely surrounded by poor secular dwellings. These notable differences can only be interpreted as suggesting that this building was an important private house, rather than a religious edifice. The bricks employed in its walls ranged from 47 to 50cm. in length, from 24 to 26cm. in width, and from 8 to 10cm. in thickness, so that, as in other XI-A walls, they were smaller than the bricks used in the construction of the Round House. Both reddish-brown and gray mud-bricks were found throughout Stratum XI-A, but bricks of the latter color were far more common. Stone was rare.

C. STRATA XII AND XII-A

(PLATES VIII-X; XXXVI, XXXVIIa)

Two strata form our third group, namely, XII and XII-A. While Stratum XII represents a full occupation of the mound—at least in the investigated northern and eastern parts—only a few walls of the earlier layer of XII-A were discovered in the same areas. Moreover, these XII-A walls were so scattered and ruined that not a single building could be traced in full. Though the 120 burials dug from Stratum XII unquestionably contributed to the destruction of some underlying XII-A walls, the settlement of XII-A seems, in any case, to have been only a limited, secular reoccupation of Gawra after its restriction in Stratum XIII to religious buildings.

This humble resettlement of Gawra in Stratum XII-A times soon developed into the thickly populated township of XII. Stratum XII represents an expansive growth from XII-A beginnings, for in the confused stratigraphy of these levels are a few walls of XII-A which had been used again in the succeeding period of XII.²¹ As a result of the grave-digging and ground-clearing operations by Stratum XII inhabitants which destroyed some underlying walls, and because of the re-use of other XII-A walls in the constructions of Stratum XII, the two levels cannot be sharply demarcated. Nevertheless the same factors also demonstrate the extremely close relationship of these settlements, resulting in the present joint grouping.

The architectural affinities of Strata XII and XII-A find confirmation in the material products of their inhabitants. Only minor changes may be noted in the pottery of Stratum XII when compared to that of XII-A, so that it may now be regarded as certain that both levels represent a single, uninterrupted cultural phase. Far more important than the few inconsequential differences in the material culture of XII and XII-A is the fact that upon reaching Stratum XII we have descended to a period whose outstanding product was a distinctive, monochrome-decorated pottery. As that era had its beginnings as early as Stratum XIX, it is thus represented at Gawra by a remarkable series of ten

consecutive levels which attest to its long duration. How that lengthy period came finally to its end is an interesting problem which, however, must be considered in the following description of Stratum XII.

Stratum XII (Plates VIII, IX, XXXVI, XXXVIIa). The excavated area of Stratum XII contained no religious structures, and only a single building which may have served as a watchtower, so that it is completely secular in character. In this respect it markedly differs from succeeding occupations, where religious and military buildings were the dominant constructions. Moreover, Stratum XI-A has already been described as the earliest level of a period characterized by unpainted pottery, tombs, and a distinctive type of temple architecture. All these features are lacking in Stratum XII, which is thus representative of an earlier and different culture. In view of this cultural cleavage, the defensive precautions adopted by the builders of Stratum XI-A are surely significant, and may well indicate continued hostility between representatives of the old and new civilizations, even after the latter had become established at Gawra. The testimony of Stratum XII tends to support that view, for unlike the immediately succeeding occupations which were peacefully superseded, the present level seems to have come to a sudden and evidently violent end.

Evidence to this effect is restricted to the northern section of Stratum XII. Room 42 (the White Room—so called because of its white plastered walls), as well as Rooms 18, 43, and 49 bore clear signs of having been destroyed by fire. Room 18 was covered with forty centimetres of ashes and its walls were strongly fire-marked, while many objects were found scattered on the floors of the White Room and Rooms 32, 37 and 38 (Squares 4-M and 4-O). "A very thick layer of ashes and charred refuse lay over the whole area [of the White Room complex], so it appears that it must have been destroyed by fire, which would account for the profusion of objects, left by people fleeing the destruction. We have other evidence of a hasty departure, in that one room had a small cooking-stove in a corner, in which nestled a cooking-pot with a lid. Inside it were the bones of the meat which may

²¹ BASOR., 65, pp. 6-7.

have been in the process of being prepared for some luckless person's dinner, at the time of the conflagration." (C.B.)

In addition to these signs of fire, Room 44 of the White Room building contained the skeleton of a baby lying on the floor, while at the rear of the White Room itself lay the remains of a child of about twelve or fourteen years. Furthermore, in Room 80 at the end of the curved street in Square 6-O, the skeleton of a child of approximately the same age was discovered, sprawled on its face, with a stone (perhaps thrown from a sling) in its back (Plate XXXVIIa). The narrow, three-sided enclosure in Square 6-Q, lying between Areas 63 and 65, contained similar evidence of a struggle, for there the skeleton of a youth was found, lying half-turned on his back, with arms outstretched.

On the other hand, the lack of further signs of fire in the remaining portions of Stratum XII, coupled with the fact that only these four skeletons were found on its floors, suggests that the settlement was quickly overrun after its main northern gate had been entered, perhaps by surprise. The two skeletons in the White Room and in Room 44 may have been accidental deaths as a result of the fire which destroyed that building, but the skeletons lying in Room 80, and in the enclosure in Square 6-Q to the northwest are positive evidence of violence since those buildings were not included in the conflagration. It is even possible that more inhabitants of Stratum XII met their deaths before the capture of Gawra, and that their bodies had been thrown down the slopes of the mound, or hastily interred at its foot, but there is no proof for such a theory. Thus, while massacre and complete destruction do not seem to have accompanied the end of Stratum XII, it is plain that the occupation was terminated by other than peaceful means. Soon after the fire in the northern sector the stratum was deserted, for no attempt seems to have been made to re-use or rebuild the fire-consumed White Room building, while the corpses in Squares 6-O and 6-Q were allowed to remain where they had fallen.

There are as few connections between Strata XII and XI-A in an architectural sense as there are in material culture. No walls, rooms, or buildings had been used in both occupations, and the inhabitants

of Stratum XI-A do not seem to have fallen heir to any elements of architectural tradition embodied in the constructions of XII. Those levels are thus culturally and architecturally disjoined. How long Gawra remained abandoned after the destruction of XII cannot be readily determined. However, the floors and pavements of XI-A in most cases lie only one metre or less above those of XII, and since that figure is often exceeded in the interrelated strata overlying XII, it cannot be contended that the debris separating XII and XI-A represents an exceptionally long period of time. If, as it would appear, the Round House and watchtowers of Stratum XI-A had been erected by the same people who conquered Stratum XII, the interval separating the two levels must have been short, even though the strata are completely unconnected. Hence it is probable that the construction of Stratum XI-A began soon after the end of XII, although the two layers were separated by a brief interval.

Nearly one-half of the area of the mound at the level of Stratum XII has been excavated, for in addition to the northern and eastern sectors, the southwestern part of the mound in Squares 7-M through 11-M was explored by means of the sounding trench begun in Stratum X-A. As in later levels, that sounding uncovered no building remains of XII in the central or southwestern parts of the mound, except for the U-shaped wall in Squares 7-M and 7-O. That wall, however, is of importance since its location directly below the northwestern part of the Round House is one of the factors proving that building to have been part of Stratum XI-A (p. 21).

The main part of the Stratum XII settlement seems to have occupied the northern and eastern sectors where a crowded mass of building was uncovered.²² Nevertheless the curved street extending from Square 4-Q to Square 6-O, and other similarly oriented passages suggest that additional XII buildings lie in unexcavated portions of the mound, especially to the northwest, and perhaps in Squares 7 and 8, J and K, at the southeast. Like Stratum

²² The northwestern, northern, and southeastern sectors of Stratum XII, particularly near the fringes of the settlement, were nearly 75cm. higher than the central portion. This is, apparently, the result of uneven stratigraphy in underlying levels (cf. p. 37).

XI-A, the excavated portion of XII had a north-south-southeast axis. Originally, a street seems to have extended from Area 101 in Square 5-J, through Areas 99, 95, 93, 35, and 82, where it connected with the curved street in Square 5-O at Area 78. Almost all of the larger buildings of XII opened on this street, but for some reason it was blocked in Square 5-M in a late stage of its existence. Access to the structures on the eastern edge could then be had only through the passage numbered 94 (Squares 5 and 6-K), or from the south.

The street curving away from the northern edge of the mound is more clearly defined. It began in Square 4-S or 4-Q, and turned gradually in Squares 5-Q and 5-O until it was lost in the scarp formed by unexcavated debris in Square 6-O. Area 82, in front of the White Room, may have been originally entirely open to this street, but the wall extending south from the western corner of that building was later added, apparently to shelter its entrance. Parallel to the curved street and west of it appears to be another, wider street formed of Areas 66, 64, and 63, the two being separated only a thin series of rooms: Nos. 54-58, 60-62, and 76. The latter are little more than small enclosures and are just large enough for human habitation. A more pretentious building is formed of Rooms 54-56 (Plate XXXVI.b). The position of this structure directly on the northern edge of the mound, between the curved street and Area 66, hints that it may have guarded this entrance to the settlement. An analogy has already been provided for such an assumption, for in both XI-A and XI buildings existed in the same, or in adjoining squares which undoubtedly served as watchtowers dominating a path up the northwestern slope of the mound. That path was thus in use as early as Stratum XII, and in that level, as in Strata XI-A and XI, connected with a street bisecting the settlement. Unlike those later strata, however, Stratum XII apparently possessed no southeastern gateway, although one may lie in the unexcavated Stratum XII debris of Squares 6 and 7, J and G. If so, the reason for the north-south-southeast orientation of the occupation would become clear, since the street would have connected both the northern and eastern gateways, precisely as in Stratum XI-A.

The outstanding edifice of Stratum XII was furnished by the White Room and the smaller rooms to the northwest and southeast (Nos. 37-45; Plate XXXVI.a). This large structure had evidently had a long history, for its southeastern wall had been removed, and the building enlarged at some time by the addition of Rooms 37 and 38, which destroyed the balanced symmetry of its exterior design. The remaining portions of the building were unaltered, so that it is possible to reconstruct the plan as it must first have appeared. As planned, the building must have been square or nearly so, its length of 12.30m. being closely matched by its probable original width of 11.75m. Like almost all archaic structures of Gawra constructed on formal lines, the ground plan of the present edifice features a long central room occupying half of the available interior width, with flanking rooms on both long sides. On the exterior, the front and rear of the long central room project beyond the line of the walls of the side rooms. Harmonizing with these bays was a wide recess in the central part of the northwestern side wall, and it is probable that this was matched on the opposite, southeastern wall by a similar recess which had been destroyed in the later reconstruction of this wall. The projection at the front of the building was broken by two doorways leading into the main, central room. Immediately to the right and left were two additional doorways leading into the forepart of the flanking rooms. Those side doorways were balanced by two more at the rear of the central room, again leading into the ancillary rooms.

The walls of the central room were coated with white plaster. Against the rear, northeastern wall of this White Room, and extending about 3.50m. from its eastern corner, was a bench constructed of mud-brick, about 35cm. high. In the same wall were two niches approximately 60cm. wide and 25cm. deep. Three flanking rooms lay on the northwestern side of the White Room; whether these had duplicates on the southeastern side of the building cannot now be ascertained, because the original southeastern wall had been removed, and a more extensive set of rooms added on this side. Of these, Rooms 37 and 38 were the main additions. Nos. 39 and 40 had no doorways, and were

too small to have been more than storage bins, while No. 41 was probably a corridor connecting the White Room and the newer Room 38 until it was unaccountably blocked off. Another blocked doorway into Room 38 led into Room 37 at the front of the building.

The numerous graves found below the floors of this structure, as well as around it (Chapter III, p. 103), cannot be accepted as an indication that the White Room had been used for cult purposes, for almost all Stratum XII buildings were similarly characterized. Nor can the alignment of its corners to the points of the compass have been more than the fortuitous result of its position. Positive indications of the secular nature of this complex are to be found in the oven built in the northern corner of Room 43, and in the profusion of household objects found scattered on its floors. Included among these were numerous pottery vessels, seal impressions, and spindle whorls, as well as celts, obsidian implements, and a single stone vessel, all of which had been buried under a thick layer of ashes and charred refuse. Nevertheless the dimensions, location, and architectural formality of the White Room building unquestionably point to its importance in the Stratum XII community. To what this importance was due cannot now be stated with assurance. The flanking rooms of the structure had definitely been used as living quarters, but the White Room itself may have had some public function unconnected with religious practices.

Reflecting the distinction of the White Room building is the fact that a smaller replica of it lay less than ten metres to the southeast. That building, which was formed of Rooms 25-31, was identically oriented, and faced the street leading into Plaza 82, in front of the White Room complex. Its ground plan duplicates that of its larger counterpart, for there is the same large central room bordered on the two long sides by smaller rooms, and the same projecting bays at the front and back of the main room. Even the rear wall of that room bears the two niches which characterized the White Room. The doorways to the ancillary rooms likewise occupy the same position as in the White Room, two being found on opposite sides of the central room,

at both front and back, although one of these (in the eastern corner) was later blocked. Later alterations probably destroyed further similarities between the two buildings, as well as what may have been a symmetrical plan, for the side rooms were re-planned and reconstructed, and in this process the side walls of the building were largely destroyed.²³ Part of the southeastern wall remained, however, and this had a wide niche, precisely as in the northwestern wall of the White Room building (between Rooms 29 and 30). In only one important respect do the two buildings differ. The smaller structure lacks the two doorways in the front bay of the White Room, entrance to the building being effected through the side doorways from Rooms 31 and 105.

Like the White Room building, its smaller replica contained pottery vessels and other household objects, so that it could not have been a sanctuary, even though a number of burials had been made beneath its floors.²⁴ It may be doubted also that any religious edifice would have undergone the serious alterations to be noted in the present structure. However, like the White Room complex, it is possible that this building served some communal purpose in addition to being a dwelling for some eminent member of the occupation.

The only other structure of Stratum XII requiring attention is the large building lying chiefly in Squares 5-M and 6-M, comprising Rooms 84-92. The southwestern end of this building seems to have been destroyed in ground-clearing operations by the builders of the Stratum XI-A Round House, while some of the inner dividing walls, particularly in the western and northwestern parts, were demolished by interments made from the same level. However, the main entrance to the building seems to have been at the northeast, where it opened into Area 35.

²³ Part of its western corner was demolished by the storage pit in Squares 4-M and 4-K, which must have been sunk from Stratum XI, for it cut through XI-A walls in Square 4-M. This pit (or more probably well) was cleared of the earth filling it down to the level of Stratum XVII without encountering the bottom.

²⁴ One of these (Locus G36-29) contained an infant interred in a large jar whose painted decoration appears to reproduce features of varied landscapes. Cf. Chapter IV, p. 150, and Plate CXXXIX, Fig. 309.

Extending from this doorway to the rear of the structure was a narrow passage, on one side of which were four long, narrow enclosures, while on the other were three smaller ones. These enclosures are too small and too narrow to be described as rooms, though what other function they possessed is not now clear. No building having a similar ground-plan has yet been discovered in any Gawra occupational level.

In regard to the construction materials employed in Stratum XII, all walls were made of mud-brick. The bricks used in the White Room building and in other constructions of XII measured 47 and 48cm. in length, 25 and 26cm. in width, and in thickness ranged from 6 to 8 cm. They were thus approximately of the same size as the bricks of Stratum XI-A (with the exception of the Round House where larger bricks were employed), although being decidedly thinner than the bricks of any later stratum. Stone, as in Stratum XI-A, was extremely rare and was used only as a paving material. Except for the stone pavement around Room 14 in Square 3-M, stone was otherwise found in Stratum XII only on the northern edge of the mound. The walls of Stratum XII were uniformly thicker than those of succeeding occupations. The bonding of the mud-bricks forming the forepart of the White Room is illustrated in Plate IX.

Stratum XII-A (Plate X). The description of the architectural remains of Stratum XII-A need not detain us long. The scanty walls of XII-A had been so thoroughly cut up by the later building activities of the inhabitants of Stratum XII, and by the graves sunk from that stratum, that not a single complete building was discovered. Furthermore, the only walls of XII-A uncovered were found on the northern and eastern rim of the mound, no contemporaneous walls having been discovered near the center of the mound, although the same areas excavated in Stratum XII were investigated in XII-A. On the other hand, Stratum XII-A was probably not so completely a marginal occupation as the plan of that level would lead one to believe. The lowest portions of Stratum XII lie in Squares 5 and 6; O, M, and K, where some floors are only 7.23 to 7.38m. above the datum. The tops of Stratum XII-A

walls in adjoining squares have elevations of 7.57 to 7.91m., so it is probable that additional XII-A walls which originally existed twenty to thirty metres from the northern and eastern edge of the mound had been removed when Stratum XII buildings in the same sector were constructed.

The architectural connections implied in the grouping together of Strata XII and XII-A are to be found chiefly in Squares 3-M and 4-M, where it appears that some XII-A walls were utilized again in the succeeding level. In these squares of Stratum XII it is significant that parallel double walls are the rule, and it is possible that some units or portions of these actually were constructed in XII-A.

However, the walls of XII-A are not connected in any manner with those of Stratum XIII. Indeed, the construction of Rooms 12-16 of XII-A immediately over the Northern Temple of XIII, and Rooms 8-10 over the Central Temple would seem to indicate that those edifices were not regarded as sacrosanct at the time of the founding of XII-A. How this fact is to be interpreted is uncertain, for it may imply a sudden change in religious thought, or may equally as well have been the result of the desertion of the mound for a period long enough for the religious tradition of Gawra XIII to have been forgotten.

Three main groups of XII-A walls may be noted. The first lies on the northern edge and includes Rooms 26-32, evidently part of a larger structure extending into unexcavated debris in Squares 6-S and 7-S. The second is formed of Rooms 7-18, lying over the Northern and Central Temples of Stratum XIII. Two or possibly more separate structures may have existed here, of which one is formed of Rooms 12-15, and the other of Rooms 8-10. Between the two groups mentioned, in Squares 4 and 5, O and Q, are a few fragmentary walls which may represent two additional houses. The last group of walls lies on the eastern edge, in Squares 4-G and 5-G, and comprises Rooms 2 and 4, and the long straight wall marking off Area 3. All walls are constructed of mud-brick, but no information as to brick sizes is available.

D. STRATA XIII AND XIV
(PLATES XI- XIV; XXXVII.b, XXXVIII,
XXXIX)

Stratum XIII, which is distinguished by an acropolis formed of three Temples arranged around a large court, has absolutely no architectural connection with the immediately underlying occupation. In fact, the architectural dissimilarities between the two levels are far more prominent than any possible relationships, for XIV seems to have been restricted to a small fraction of the available area of the mound, and the building remains of that level were represented by the stone foundations of a single structure. In a strict sense, indeed, the Stratum XIV building appears to have closer affinities with Stratum XV than with any of the constructions of XIII. Despite this, it is impossible to disassociate the two levels. This is entirely the result of the planning and thoroughness of the builders of XIII who, intent on the creation of their magnificent religious monuments, were not content with a simple leveling of the underlying structure. Instead, they carefully removed every vestige of the walls of the Stratum XIV building down to its rubble foundations,²⁵ laying the lower courses of their Eastern Temple directly upon some of the foundation stones. The result was, in effect, the all but complete consolidation of two levels into one, and if it had not been for the fortunate circumstance that the foundations of the Stratum XIV building were made of stone, the complete separation of the two strata might have proved an impossible excavation task. For the same reason it was not feasible to distinguish objects of Stratum XIV manufacture from those of XIII, and the material products of both levels have therefore been described in the following chapters as having originated in Stratum XIII only. Thus the present heading reflects only

²⁵ The reason for the removal of the Stratum XIV walls perhaps lay in the desire of the Stratum XIII builders to fill in the depression lying between the northern and eastern peaks of the mound which had been formed in Strata XV, XV-A and XVI (see below, p. 37). In this, however, they were only partially successful for even Strata XII and XII-A were characterized, though to a lesser degree, by the uneven stratigraphy so typical of the underlying levels (cf. footnote 22, above). Only in XI-A did the stratigraphic floor return to a comparatively horizontal plane.

the close physical juxtaposition of Strata XIII and XIV and does not imply (as do all other groupings of levels in this chapter) any architectural relationships between them.

Stratum XIII (Plates XI-XIII; XXXVII.b, XXXVIII, XXXIX.a). This level has furnished the finest examples of architecture yet yielded by Gawra. Only three buildings occupied the stratum, all situated on the northeast edge of the mound, but their large size and architectural excellence more than compensate for the absence of additional structures. Furthermore, the three buildings form an acropolis, since all were temples; in this respect the present occupation may be compared only to Stratum VIII, the only other level excavated so far which was exclusively dedicated to religious purposes.

The acropolis covered an area measuring approximately thirty metres square, its units having enclosed on three sides a large open court, roughly eighteen metres long and fifteen wide (Plate XXXVIII.a). The remaining side of the court was closed off by a number of thinner, undecorated, and disconnected walls which formed no recognizable buildings, but seem instead to have been intended as screening walls. Not a single secular building attributable to Stratum XIII was uncovered in the excavated area, which lay in Squares 3-6, G-S. It thus follows that the contemporaneous secular dwellings must be located either in the uninvestigated southern and western sectors, or at the base of the mound, for the magnificent acropolis could only have resulted from the common effort of a fairly large and well-organized community.

All the Temples had their corners oriented to the cardinal points of the compass, thus duplicating that feature of later sanctuaries, but only one of the three was completely preserved. This was the Northern Temple, the smallest of the three, which occupied most of Squares 3-M and 4-M (Plates XII, XXXVIII.b). That edifice had a greatest length of 12.25m., and a greatest width of 8.65m., the remaining parallel walls being slightly shorter so that the structure was not strictly rectangular. Each of the two long sides was featured by a wide, deep niche in its center. These form the main decorative detail of the building and relieve what might other-

wise have been a monotonous façade. The deep niches do not, however, extend to the interior walls, but leave narrow air spaces separating the interior walls of the building from the rear walls of the niches. In this refinement it is possible to see an exemplification of the fine sense of balance and harmony evident in the building as a whole, for if the deep niches had been backed on the interior wall they would have approached the size of a *livân* or small court, and the decorative piers and pilasters that they contained would have been obscured.

The constricted middle of the building resulting from the deeply-niched exterior walls furnishes the key to its interior plan. Fundamentally, the sanctum was formed of three parts, the wide, balanced ends being connected by a narrow waist. But the remarkable talents of the architects provided a further refinement. This consisted in extending the interior middle walls until they entered both ends of the sanctum as free-standing members. This expedient served more than one purpose; it screened the entrance to the building, and it produced, in effect, flanking rooms on both sides of the sanctum such as distinguished the temples of later levels. Moreover, it created an impressive vista for the worshiper who stood in the lower end of the sanctum looking towards the cella.

Fully as important as this harmonious plan was the architectural decoration of the edifice. As in the Temples of Strata VIII, IX, and X, this takes the form of recessed niches, but in the present Temple, as well as in the other two religious edifices of Stratum XIII, this ornamentation is encountered for the first time on both the exterior and interior wall surfaces. The disposition of these decorative units is not consistent throughout the entire Northern Temple. The double-recessed niches found on its exterior walls are completely absent from the north-western or rear façade, indicating that they were purely ornamental and served no structural function. Within the edifice, every corner of Rooms C and D adjoining the cella contained piers with quarter-pilasters, while, in addition, two deep piers also with quarter-pilasters projected from the cella's rear wall towards the free-standing interior walls. Between these two a double-recessed pier made of double pilasters occupied the very center of the wall,

lying directly opposite a similar double element at the other end of the hall. Identical double-recessed, double piers occurred on both the interior middle walls, four of them on each side, but the end of the Temple opposite the cella was otherwise architecturally unadorned. In Room A, which served as the antechamber of the sanctuary, the corners of the front wall were decorated only with double pilasters. The purpose of the U-shaped enclosure in Room B is obscure, but it may have been used for the storage of offerings or the like. At any rate, this corner of the building was held in little regard, for Room B lacks architectural embellishment of any kind.

The only entrance to the Northern Temple lay to the left of the deep, elaborately decorated central niche in the southeastern wall of that edifice. This is shown as a single doorway leading into Room A on Plate XII, but it is possible that this Temple, like the Central Temple and Eastern Shrine, possessed a double opening (cf. Plate XI). More important, however, is the fact that the doorway led through the side of the building, and not through a short wall as was the case in later temples of Gawra. Upon entering the small antechamber formed by Room A the visitor was compelled to turn left and then right before reaching the end of the great hall, across which lay the cella. "This indirect mode of access is a noteworthy feature in the architectural history of Gawra. For it makes for a design that is radically different from the temple plans of Levels VIII—X (as well as XI and XI-A), where the entrance was framed by a *livân* and led directly to the cult chamber and cella. Even without the corroborative evidence of pottery we should thus know that we are confronted in this stratum with a wholly different culture and not merely with a lower and older occupation."²⁰

Only a few centimetres beneath the floor of the cella, exactly midway between the openings into Rooms C and D, the mouth of a well was discovered. This measured 1.15m. in diameter and it was cleared down to a point between 12 and 13 metres below its mouth where the excavations had to be abandoned due to difficult working conditions

²⁰ Speiser, *BASOR.*, 66, pp. 4-5.

and because of the danger that its walls might collapse. It is probable, however, that the wellhead is not much deeper, as at this depth it had already reached a point several metres below the level of the plain at the base of the mound. The *débris* filling the Well proved a prolific source of objects, and many fine examples of contemporary pottery, seals, and seal impressions were recovered (cf. Chapters IV and VI). In addition, the skull of a *saluki* (Plate XXXVII.b) was discovered within it, which is of interest because this breed of hunting dog is frequently depicted on contemporary seals and impressions.

This Well has no connection with the Northern Temple, at the time of whose construction it must already have been abandoned and filled in.²⁷ The implications of this fact will be reviewed below, when the question of the relative age of the three temples comprising the Stratum XIII acropolis is discussed.

Turning now to the Central Temple, that building, as its name implies, lay between the Northern Temple and the Eastern Shrine, and at right angles to them. The forepart of the edifice abutted against the corners of the adjacent structures, and this portion only had been preserved. The entire rear of the Temple had extended out beyond the present contour of the mound so that erosion, or the collapse of a supporting earth platform, caused the complete destruction of a major part of the cult chamber. But enough of the walls of the Temple had remained to permit at least a tentative reconstruction of its plan. This seems to have featured a long, rectangular sanctum, whose cella must have been located at the southeast. Only the minimum pos-

sible length of the sanctum is reconstructed on Plate XI; it is probable that the cult chamber extended alongside Room 10 until it was close to the northern corner of the Eastern Shrine. Like the cult chamber of the Northern Temple, that of the present sanctuary was decorated on the interior with double piers marking off double-recessed niches at regular intervals, while the corners were decorated with quarter-pilasters of which only the western one was preserved. No similar decorations were present on the exterior surface of the sanctum's walls; at least none was extant on the outside of the preserved western corner. The ancillary rooms of the edifice lay between the sanctum and the Main Court; these numbered four (Rooms 8-10 and 12), or possibly five if the narrow enclosure or air-space between Room 10 and the front of the building is included. The comparatively large room (No. 12) at the western corner served as the antechamber. From it access could be gained directly to the northwestern end of the sanctum, or the visitor could pass down a long, narrow hall to Room 9, or possibly even to Room 10, both of which flanked the cella and opened into it. There were thus three entrances to the cult chamber from the flanking rooms and, if the edifice had indeed extended farther to the southeast, it is probable that there may even have been four. In this particular the Central Temple is unique at Gawra, for in all other religious structures yet discovered there, the sanctum in every case could be reached only through a single doorway at one end of the chamber.

Like the Northern Temple, the front façade, which measured 14.50m., was dominated by a deep central niche having quarter-pilasters in its corners, and was further embellished by two double-recessed niches (Plate XXXIX.a). In the present building, however, the central pier was composed of a single pilaster, instead of the double one found in the corresponding niche of the Northern Temple. On either side of this principal architectural motif were two shallow double-recessed niches, those on the left (northwest) of the deep niche having been broken through to serve as a double doorway leading into the antechamber, Room 12. This provides a further parallel to the Northern Temple where the doorway likewise lay in the left end of the main

²⁷ The position of this Well below the floor of the Stratum XIII Northern Temple at first inclined the excavators to the belief that it belonged to Stratum XIV, as I reported in *BASOR.*, 70, p. 6. Later, however, it became clear that the very small population of the mound in Stratum XIV times could scarcely have been responsible for such an ambitious undertaking; moreover, the mouth of the Well was nearly 50cm. higher than the floor of Stratum XIV. It is, therefore, now more reasonably attributed to Stratum XIII where an easily available supply of water would have been a happy feature if, indeed, it were not actually necessary to an acropolis which undoubtedly attracted pilgrims from relatively great distances. This Well cannot have been dug from any level later than XIII for a Stratum XII-A wall crosses over its location.

façade, but other architectural details are at variance. For example, all four remaining niches in the front wall of the Central Temple had been broken through at a point 50cms. above the floor, presumably to serve as windows. In this connection it should be noted that the narrow enclosure behind the deep central niche is not completely closed off as in the Northern Temple, but opens into Room 9.

Though such fundamentals as the position of the doorway, the long axis of the sanctum, and the architectural decoration were identical in both buildings, it is apparent from the foregoing description that the plan of the Central Temple was not nearly as symmetrical or as well balanced as that of the Northern Temple. As if to compensate for this shortcoming, the builders of the Central Temple decorated the walls and floor of the sanctum and the walls of Rooms 9 and 12 with a reddish-purple paint.²⁸ "Where the paint has remained, the application proves to have been solid. Whether the same was true of the upper parts of the walls, especially below the ceilings, we are in no position to determine. Contemporary painted pottery exhibits several graceful floral motives, and the suggestion is therefore not entirely out of the way that the highly ornamental walls with their piers and pilasters were adorned at the top with painted designs based on foliage patterns. But there can be, of course, no certainty in the matter."²⁹ In addition, the front wall of the Temple, facing the Main Court, and the walls of the small, narrow extension of Room 8 behind the deep niche were also covered with plaster, in this case white in color.

Of the three Temples forming the acropolis of Stratum XIII, the Eastern Shrine (Plates XXXVIII.a, XXXIX.b) was the largest, and also the least complete. The front façade had a width of 20.50m., but the side walls had been preserved only to a length of 8.85m. Like the Central Temple, part of the Eastern Shrine—its eastern corner—had extended beyond the present limits of the mound and had disappeared, perhaps before the stratum had come to an end. The destruction of the remaining

rear walls may then have followed, but whether they were deliberately removed or themselves collapsed cannot now be determined. The extant portions of the Shrine were those forming the front of the building, and they illustrate a plan radically different from those of the Northern and Central Temples. The northeast section of the façade of the present edifice projected about 1.70m. into the Main Court beyond its adjoining half. Although the exterior face of this wall was decorated with the double pilasters and double-recessed niches found on the other Temples, it did not contain the deep central niche so characteristic of those structures, and its façade was consequently unbalanced and architecturally unimpressive. No less than four doorways break the front wall, two on each side of the building, but these also were unbalanced. Those on the southwestern side led into Room 2, while at the northern corner of the Shrine, set more closely together, were entrances into Rooms 6 and 7. All interior walls were undecorated save those of Room 7, which were ornamented with double piers separating double-recessed niches. In addition, a bright red plaster covered the wall surfaces of this room, which must therefore have been of importance.

While the fragmentary and incomplete walls of the Eastern Temple do not permit a positive reconstruction of its plan, the presence of architectural decoration and colored wall-plaster in Room 7 suggest, by analogy with the Central Temple, that it had served either as an antechamber or as the sanctum itself. However, since a much wider sanctum could be expected, it seems more likely that Room 7 served merely as an antechamber. If so, the sanctum must have occupied a position at the rear of the building, as in the Central Temple, but whether this had its long axis parallel to the front façade, or whether it lay only to the rear of Room 7 is uncertain. In regard to the remaining rooms, Nos. 4 and 6 seem originally to have formed a single large chamber in which the walls of Room 5 were later erected. That room had a flooring of reeds laid upon wooden cross-poles measuring from 6 to 7.5cm. in diameter, but no other evidence as to its function could be found.

Room 2, the so-called Long Room, was unquestionably one of the important units of the Eastern

²⁸ The walls so decorated are marked on Plate XI with light lines drawn parallel to the walls.

²⁹ Speiser, *BASOR.*, 66, p. 7.

Shrine, to judge from its position at the front of the edifice, and by the two doorways connecting it with the Main Court. Apparently too, it had served as a storeroom, for a shallow pit had been dug beneath its floor at the southeastern end which contained the pottery drinking vessels illustrated on Plate CXXVIII, Fig. 191, and on Plate CXXX, Fig. 204. Other important pottery objects were found on the floor of this room. A bowl, shown on Plate CXXVII, Fig. 181; another cup (Plate CXXVIII, Fig. 193); and an incense burner all were discovered here. These finds would have little but passing interest if it were not for the painted decoration of the beaker illustrated on Plate CXXX, Fig. 204, and the windows, doors, and incised decoration of the incense burner illustrated on Plate CXXXII, Fig. 228 (Plate LXXVIII.d). These appear to reproduce the architectural features of some building which can hardly be presumed to have been other than the Eastern Shrine itself, or at least one of the other edifices forming the Stratum XIII acropolis. A full description of these objects and their implications will be found in Chapter IV, pp. 143 and 145; it will suffice here to say that aside from reproducing the recessed façades of the acropolis, both objects suggest that triangular windows were a feature of one or more of the Temples. Those windows must have been set high in the walls, and were presumably framed by the recessed niches. While direct corroboration of this clue is impossible, owing to the fact that only the lower courses of the XIII walls were recovered, the original presence of those windows may now safely be assumed.

The Eastern Temple was unique in one other respect. It was the only one of the three Stratum XIII sanctuaries to have had graves dug below its floors. A total of five interments were discovered, all below Rooms 2 and 3; all contained the remains of infants or children.

The Temples of Stratum XIII, like the buildings of all levels previously described, were constructed entirely of sun-baked mud-brick. No stone was employed in any manner, although some walls of the Eastern Shrine crossed stone foundations belonging to Stratum IV. "The bricks are a surprisingly excellent building material, firm and hard to this day.

In conjunction with the mortar, made out of the same clay with ashes added, they formed walls which were more than adequate. A glance at the bonding details (illustrated in Plate XIII) which show two courses of the Northern Temple and one from the central element of the Central Temple, demonstrates that consciously or not the builders employed a module, the brick. The method of bonding was the same in all three buildings, but the unit size differed in each one. While not of an absolute uniformity of size, the bricks were surprisingly near to it, taking in account the necessarily crude method of manufacture. Those of the Northern Temple measured 36 x 18 x 9cm., the half bricks being 36 x 9 x 9cm. Central Temples bricks were 48 x 24 x 10cm. Bricks of the Eastern Shrine scaled 56 x 28 x 14cm. The unit of wall thickness was a brick and a half, which without the use of headers made a most excellent bond. It would seem that there were only the two stock sizes, the brick and lengthwise half brick. All others were had by breaking the finished product to the desired size. The stability of the clustered pilasters in the corners was not very great and made the bonding study difficult at those points. It appears that the builders occasionally inserted an L-shaped brick, and also ran the small bricks vertically through two courses every so often." (E.B.M.)

Here again the Eastern Shrine supplied a find which furnishes an important insight into the surprisingly advanced construction procedures employed by the builders of the Stratum XIII acropolis. It consisted of a total of ninety-nine model bricks made of well-baked terra cotta. Eighty-one of these lay in the Long Room and sixteen in Room 6 of the Eastern Shrine, while two came from the Main Court. Examples of full bricks (66), square half bricks (13), long half bricks (12), and quarter bricks (8) were represented. The full brick measured 43 x 23 x 7mm., the square half brick 22 x 23 x 7mm., the long half brick 43 x 12 x 7mm., and the quarter brick 22 x 12 x 7mm. Apparently these model bricks were used to determine the most satisfactory methods of bonding and building the complicated recessed piers and pilasters found in the Stratum XIII structures. All four building units represented by the model bricks were employed in

both the Northern and Central Temples, but they have no connection with the bricks used in the Eastern Shrine in which they were found, and in whose walls the largest bricks were used. If the model bricks are presumed to be in scale to the bricks actually used in construction they would seem to represent the units of the Central Temple, being close to one-tenth of their actual size.

It seems plain that the three Temples were not all constructed at the same time. Aside from the hint provided by the model bricks, evidence to that effect may be seen in the crowding of the Temples around the Main Court: in the different ground plans illustrated by the Eastern Shrine on the one hand, and the Northern and Central Temples on the other; and in the presence of a Well which had been used in Stratum XIII times, but which was subsequently covered by the floor of the Northern Temple. The alteration of the Eastern Temple, as exemplified in the construction of Room 5 in the middle of what had at first been a larger chamber, and the decay of its rear walls (which do not approach the edge of the mound), are good signs that we have here the oldest of the three sanctuaries. Furthermore, it is possible to see in the architectural decoration of the Eastern Shrine and to a lesser degree in its now incomplete plan, only the preliminary attempts at architectural expression which achieved their final and monumental goal in the superbly designed and executed Northern and Central Temples.

There are also available many positive indications pointing to a disparity in date between the Northern and Central Temples, despite the relationships between them in external decoration, in their possession of sancta characterized by long axes, and in their entrances lying at the end of long walls. For it is difficult to believe that the delicately decorated eastern corner of the Northern Temple would have abutted directly against the side of the Central Temple had they been constructed simultaneously. Furthermore, how could the differences in their brick sizes then be explained?

The superb plan of the Northern Temple tempts one to regard it, at first glance, as the final result of an architectural evolution represented by the Eastern and Central Temples. But we must not be

so easily led astray, for ample evidence exists to show that the Central Temple was the last to be built. Not the least of this evidence is the fact that the bricks used in the Central Temple possessed almost the exact dimensions of those employed in Stratum XII (48 x 24 x 10cm. as compared with 48 x 25 x 6-8cm. for the upper level), while the bricks of the Northern Temple were considerably smaller. The next factor pointing to a relatively late date for the Central Temple is the curious squeezed location of that edifice, which in addition extended to the edge of the mound, and thus occupied a position that was definitely secondary to those enjoyed by the Northern Temple and the Eastern Shrine. Even more significant is the fact that the front façade of the Central Temple did not extend the full width of the sanctum at its rear. No explanation of this peculiarity is possible unless it is acknowledged that the Northern Temple was already in existence when the Central Temple was built. Lastly, it should be noted that where the walls of the Northern and Central Temples directly abut against each other, those of the Northern Temple possess the architectural decoration found elsewhere on that edifice, although now completely hidden by the contiguous and undecorated walls of the Central Temple. It is thus the undecorated walls which are later, since it was known at the time of their construction that they would not be seen, and it then follows that the Central Temple was the last sanctuary to have been built in Stratum XIII.

The three temples forming the Stratum XIII acropolis were, therefore, all built in different phases of that level. First was the Eastern Shrine at which time the Well, later covered by the Northern Temple, was still in use. This phase may easily have been the longest, for it is probable that the Eastern Shrine had been partially destroyed, if not abandoned, before the stratum came to an end. Next, the Northern Temple was constructed on the opposite side of the Main Court when the Well had been abandoned and filled. That magnificent building marked the peak of the architectural accomplishment of Stratum XIII, for the Central Temple, which was constructed last, seems to have been in many ways a somewhat inferior copy of its pred-

ecessor.³⁰ Yet all three buildings constituted a remarkable architectural achievement which forms an impressive monument not only to their architects and builders, but also to the force of religion in contemporary times, and to the well-balanced and well-developed civilization capable of conceiving and creating them.

Stratum XIV (Plates XIV, XXXVIII.a, XXXIX.b). The only building remains attributable to Stratum XIV were discovered in Squares 4-5, J-K, where a single course of rubble forming the foundations of a large structure was discovered. These had been covered in part by the later Eastern Shrine of Stratum XIII (Plates XXXVIII.a, XXXIX.b), and were laid in a roughly rectangular outline, the long walls having an approximate length of 16 metres, while the width of the building was 12.40m. at one end, and 15.20m. at the other. These dimensions were later exceeded at Gawra only by the Round House of Stratum XI-A, and the Eastern and Central Temples of Stratum XIII. While the structure was thus imposingly large, there can be little doubt that it was secular in character, for its plan reveals no similarities to the Temples of XIII, or to the Temples of XI-A, XI, and still later levels, other than the fact that its corners were aligned to the cardinal points of the compass.

On the other hand, the structure had a regular plan and had been erected on broad stone foundations, which must testify to its importance. It is possible to theorize from this fact that additional Stratum XIV structures may yet be found in unexcavated portions of the mound, but this is no more than a guess. At any rate, the excavations in Stratum XIV, which were as extensive as in Stratum XIII, yielded no trace of other buildings of the same age.

The stone foundations of XIV formed a curious, though balanced, ground plan which featured two diametrically opposite, projecting corners, those at the north and south from which the remaining sections of all four walls receded by means of single offsets set near the centers of the walls. The in-

terior was bisected across its width by a large wide court or central chamber (Room 9), on either side of which were eight rooms. Even in the arrangement of the rooms on each side of the central court an attempt was made to maintain the balanced symmetry of the outside walls. Rooms 2-4 on the south-east exactly match Rooms 12-14 on the opposite side, behind which groups were two larger rooms, Nos. 1 and 15 respectively. Flanking the group of four rooms in the projecting southern corner were the two long, narrow enclosures numbered 5 and 6 on the plan which were matched by three smaller rooms on the opposite side of the court. The largest of the rooms, Room 10 in the northern corner of the building, apparently served as a kitchen, for within it was an oven constructed of mud-bricks. The same area in the eastern corner of the structure was divided into two rooms, Nos. 7 and 8. Aside from Room 10, containing the oven, no other rooms furnished a clue to their use, although it is possible that Room 5 was a storeroom of some kind since it contained a deep pit which, however, yielded no objects and may have been used for the storage of grain. A stone-lined and partially stone-covered drain led around the northern corner of the structure.

Nothing of the walls had been preserved save a few courses of mud-bricks in the wall separating Rooms 16 and 17 (Plate XXXVIII.a). The use of stone as a foundation material, however, marks a complete departure from the building practices of earlier and later strata where stone is sparingly employed only as a paving material. The dearth of Stratum XIV architectural remains is, therefore, counterbalanced by the introduction of a new construction method which may have been the result of external influence. In the stone foundations of Stratum XIV it is thus possible to see the beginning of a wave of new ideas which reach their culmination in Stratum XIII, where architecture, pottery, and seals, in addition to religious and social practices, all bear testimony to the force of the reviving influence. Against this connection with Stratum XIII, however, may be placed two details of the Stratum XIV building which could have developed from earlier architectural precepts. The projecting corners of the structure just described, as well as its

³⁰ For a similar view of the chronological order in which the Temples were constructed see Müller, in the *Architectural Record*, Vol. 82, No. 3 (Sept. 1937), p. 36. Contrast, however, Speiser, *IASOR*, 66, p. 9.

central court, find approximations, although no exact duplicates, in the architecture of Strata XV and XVI. It is difficult, therefore, to evaluate the position of Stratum XIV in the history of this period, since it has only the most tenuous connections with the earlier as well as the later strata. Though these seem to reflect Strata XV and XVI architectural ideas, much more evidence is required before any definite opinion can be ventured.

E. STRATA XV-XVI

(PLATES XV-XVII, XL, XLI, XLIIa).

The three strata listed under the present heading form a compact, sharply demarcated stratigraphic division. They are architecturally disjoined from Stratum XIII in that none of the present occupations possessed a religious edifice, while Stratum XIII had no structures of a secular character. Similarly, there exist no bonds by which they may be related to earlier strata, where the circular *tholoi* and an early type of temple proved to be the outstanding constructions. Thus separated from adjoining levels, these three strata also display internal relationships which effectively knit them into a single stratigraphic unit. Structures with identical ground plans featured the terminal strata of XV and XVI, while one of the largest buildings of Stratum XVI had also been used in Stratum XV-A, proving the latter level to have been an uninterrupted continuation of the period represented by Stratum XVI. In addition, all were characterized by numerous long, rectangular bins or stalls which are unknown in earlier or later levels. Finally, these occupations are represented by debris totaling little over a metre in depth, indicating that they must have followed each other in comparatively rapid succession.

In another respect, too, Strata XV, XV-A and XVI all shared a common characteristic. All of them—at least in the investigated northern to south-eastern sectors of the mound, comprising Squares 3-6, S-G and E—were divided into two sections by an unoccupied depression extending roughly east to west in the M and O squares. The dwellings and other constructions of the present levels were consequently located on two peaks rising above the central depression. These peaks grew with each successive reoccupation until in Stratum XV, and

in the pre-Northern Temple phase of XIII, they reached their maximum height of from one to one and one-half metres (cf. footnote 25, above). The division of the settlement into two separate occupation areas, with the resultant creation of peaks and a central depression, may even have begun in Stratum XVII, but the uneven stratigraphy typical of the present group first became evident in Stratum XVI.

The architectural unity of these strata is affirmed by the products of their material culture. The pottery and other artifacts proclaim the common heritage of the inhabitants of Strata XV, XV-A, and XVI in the civilization which had its beginnings in Stratum XIX and came to a sudden end with the destruction of Stratum XII. Above all, the pottery of the present stratigraphic group forms a remarkably homogeneous collection, which may thus be taken as representative of a middle phase of that long period typified by a distinctive class of monochrome-painted wares.

Stratum XV (Plates XV, XL). The eastern peak of Stratum XV (Squares 3-6, M-G) was occupied by four private houses, the only buildings uncovered in this level. Two of these, in Squares 4-M and 5-M, had no special architectural interest since they were composed of single, though large rooms. The larger of the two, which included areas 37 and 38, was moreover partially destroyed by the intrusive pit or well sunk from Stratum XI. The two remaining houses, however, are of greater importance, since both possessed notable ground plans.

First to be noted is the house formed by Rooms 15-20, 26, 27, and 30-34, which lay for the most part in Squares 4-K and 5-K (Plate XLb). It is probable that the areas numbered 29 and 35 were originally enclosed by walls belonging to this building, these rooms then having corresponded to Rooms 26 and 15, respectively, on the opposite side. But the structure had undergone changes in which these corners had been rebuilt so that there is nothing now to suggest such a restoration except its otherwise well-balanced plan. That plan was based on a central court measuring 9.60m. in length and 3.00m. in width extending across the length of the building. With a careful regard for symmetry, its architects placed the four doorways leading from

the flanking rooms into the court opposite each other, two on each side and two at each end. The single entrance into the building was at the eastern corner, where there was a stone sill leading into an antechamber (Room 15). The exterior lines of the structure reflect the balance of its internal arrangement. The widest part of the house is located in the middle of its long walls, at the rear of Room 19 on the one side, and Rooms 32 and 33 on the other. From these points the remaining sections of the long walls were regularly recessed or echeloned back to the ends of the building. This stepping or recessing added immeasurably to the attractiveness of the plan, and was further accentuated by the construction of a deep recess or niche at each of the narrow ends of the building, adjoining the central court. The removal of Rooms 39 and 35 as mentioned above, the addition of the flanking walls to Area 14 on its southeastern exterior, and the opening of a second entrance into the building through Room 33 were all later alterations of what originally had been a symmetrical and pleasing example of archaic architecture. It remains only to be pointed out that this excellence is enhanced by the fact that it was a private dwelling, rather than a public or religious edifice.

The remaining Stratum XV house is located chiefly in Squares 4-G and 5-G, and is formed of Rooms 3-9 (Plate XL.a). Much smaller than its neighbor to the northwest, it measured 8.00m. in length and 6.60m. at its greatest width. The sides, rather than the corners of this structure were oriented to the cardinal points of the compass, the long walls facing north and south. Though it was unquestionably a private dwelling, three graves were found beneath the floor of Room 6. Its plan is simple and regular, revolving around a central court or chamber (Room 6) extending across the width of the structure, on each side of which lay three smaller, subordinate rooms. The only entrance to the building was through its northern wall, Room 7 having served as the antechamber. As in the Stratum XV house just described, the arrangement and size of the rooms were adjusted to the architectural effect desired on the exterior of the building, which was featured at the west by a wide recess, and on each of the short (north and south) sides by a cen-

tral projecting bay. The eastern wall had been rebuilt, and in this process the original southeastern corner was completely removed and an extremely thick, shapeless wall was erected at the rear of Rooms 5 and 6. As a result, it cannot now be ascertained whether a recess had been constructed in its eastern wall similar to that on the opposite side, but the otherwise precise regularity of its architecture suggests that such had originally been the case.

The presence of a central recess in the western wall, and of central bays in the adjoining north and south walls, resulted in the creation of small square rooms (Nos. 3 and 9) projecting from the northwest and southwest corners of the edifice. These, coupled with the recess separating them, are the distinguishing features of its plan, which is thus essentially similar to the Stratum XI thick-walled building lying on the northern edge of the mound, in Squares 5-Q and 6-Q. Another parallel is provided by the plan of the southernmost Stratum XVI structure, the fresco-decorated building in Squares 6-G and 6-E. The analogy between Strata XV and XVI buildings is instructive, for it illustrates the common architectural tradition shared by the builders of the present group of levels. On the other hand, their apparent relationship to a structure of Stratum XI presents a problem. That problem, however, does not consist merely in explaining the wide stratigraphic span represented by XI through XV and XVI, for temple architecture in Strata VIII through XI-A likewise remained consistent throughout that almost equally long period. More important is the question of how an architectural model was able to be reproduced in the constructions of a people who were representatives of a different civilization. In this regard, it may be mentioned that Strata XVIII and XIX were distinguished by temples whose fundamental resemblances are not with the religious structures of Stratum XIII, but with the Temples of Levels XI-A through VIII. This circumstance furnishes a parallel to the similarities between the buildings of Strata XI and XV just described, and conclusively shows that the thick-walled structure of XI-A cannot have been an independent architectural invention, but must illustrate an architectural tradition which had begun in Obeid times and was revived in

the following period. This eclecticism is especially interesting in view of the conflict accompanying the establishment of the Uruk culture at Gawra in Stratum XI-A (p. 18).

The remaining constructions on the eastern peak of Stratum XV consisted merely of a few scraps of walls and three large ovens or kilns in Squares 5-J and 6-J. The walls enclosing the Stratum XIII Well in Square 3-M, however, merit more careful attention. Although they now appear on the plan of Stratum XV, these walls belong in all likelihood to the pre-Northern Temple phase of Stratum XIII, for they seem to have been erected around the mouth of the well which they exactly enclose, while the 6.84m. elevation of the top of the wall would place it only one centimetre below the floor of the Northern Temple. It should also be noted that although the base of the wall had an elevation of 6.38m., all other Stratum XV floors lay considerably below that level.

Turning now to the northern peak of Stratum XV, that eminence was occupied entirely by a few ovens or kilns and by groups of long and very narrow enclosures which could not have been suitable for human habitation. The township of Stratum XV was, therefore, not only topographically divided by the central valley or depression; it was functionally divided as well, the northern peak being devoted to industry, while on the eastern peak were the homes of its inhabitants. The kilns and ovens require no detailed description for, although large, they illustrate no specialized construction. The long, narrow enclosures, however, are more interesting, for no similar constructions are known in later levels. They were usually found in groups of from two to four, some groups varying widely as to size with the largest single units measuring approximately six metres in length, and fifty centimetres in interior width. These proportions are more suggestive of a storage compartment than of a habitation, and the presence of three ovens or kilns on the same peak may hint that these bins were used for the storage of pottery manufactured in the kilns. However, it is also possible that grain, or even wood which later served as fuel for the kilns, may also have been stored within them, although no traces of any such materials were found. As only the lower courses

of bricks were extant, it was impossible to tell how high these bins stood; the only examples of this construction discovered on the eastern peak (Square 3-J) were unique in having open ends (Plate XL.b, right background).

No information is available as to the sizes of the mud-bricks employed in Stratum XV or in earlier levels, but, unlike Stratum XIV, stone was used in only a few instances, and then only sparingly as door sills or paving material. The square enclosure in Square 6-O is Tomb G36-150, sunk from Stratum XI-A, while the double enclosure shown in Square 4-O was a unique plastered and double-compartmented grave (Locus G36-148), also from Stratum XIII. Both burials will be described in later chapters.

Stratum XV-A (Plate XVI). From an architectural standpoint, Stratum XV-A is the least interesting of the three levels forming the present group. It was distinguished by no large private houses, as were Strata XV and XVI, its constructions consisting merely of the storage stalls already known from Stratum XV, and some small, poor dwellings. It was embellished by one more pretentious structure, lying in Squares 4-Q and 4-O but this had been built in Stratum XVI, and had continued in use during the period represented by XV-A. The central depression and two peaks characterizing Stratum XV were also found in the present level, but the eastern peak was occupied by a single house, all other constructions having been erected on the northern peak, and on the northeastern edge of the mound, where there had been, apparently, a high rim. Although the E, G, and J squares were excavated in Stratum XV-A, no contemporaneous building remains were discovered there. Stratum XV-A may, therefore, be considered a limited rebuilding and re-use of the earlier settlement of XVI, and it is undoubtedly to be interpreted as only a short transitional phase of the period represented by Strata XV through XVI.

Few of the constructions of Stratum XV-A need be singled out for individual description. The largest structure (aside from the house originally constructed in Stratum XVI, which will be described with that level) lay on the eastern peak in Squares 4-K and 5-K. It was, presumably, a private house,

but its asymmetrical shape and the absence of architectural features of any kind is typical of the stratum. A stone-floored fireplace in the large central room (Nos. 6 and 8) is the only detail of interest.

Squares 3-O, 4-O, and 3-M contained a small complex of rooms, of which Nos. 23, 24, 28, and 29 form a recognizable house, entered from Area 30. An alley appears to have separated this group from a second to the northeast, of which only part of three rooms were excavated (Nos. 19, 26, and 27). Another complex lay in Squares 4-S and 4-Q, but these are even smaller and less coherent in plan, and could have been little more than hovels. The remaining walls of the stratum form storage bins of the type known from Stratum XV.

Stratum XVI (Plates XVII, XLI, XLII.a). Two peaks formed by the central depression in the M and O squares again characterized the present settlement, but unlike Stratum XV, the occupation was not sharply divided along functional lines by this uneven stratigraphy. The northern peak, to be sure, was occupied only by a single house and by numerous storage bins and kilns, but this house was the largest of the level, while the storage bins were here less common than in the two upper levels of the group. Like Stratum XV, most of the mound dwellings at this time were located on the eastern peak where, however, there was also situated the largest kiln yet discovered at Gawra.

To begin with the eastern peak, the outstanding structure of Stratum XVI lay, for the most part, in Square 6-E on the southwestern edge of the mound (Plate XLI.a). The western and southwestern walls of this building could not, unfortunately, be traced as they extended into the southeast-northwest scarp formed by the restriction of excavation activities, in the present and in later levels, to the northern to southeastern third of the mound. However, at least three-quarters of the structure was uncovered, measuring seven metres in length and six in width, and it is possible from this portion to reconstruct its complete plan, which strongly resembles that of the house formed by Rooms 3-9 of Stratum XV. As in the later building, that plan was featured by a long central court and by two small square rooms projecting from the corners of the long northern wall. Those rooms were separated

by a wide recess in the exterior of the wall, making this portion of the structure identical with its Stratum XV counterpart. The remainder of the building was less regular, but this seems to have been due to subsequent alteration of its original plan, particularly at the eastern end. It is probable, for example, that the small square room in the southeastern corner was initially equal in size and shape to the two on the opposite side of the court, and that a duplicate of those still exists in the unexcavated southwestern corner. The eastern wall had been so completely reconstructed that it is now impossible to tell whether it featured a middle bay as in the Stratum XV structure, but what is now designated as Room 1 probably was, as first designed, merely a recess in the middle of the wall to correspond with the extant one on the opposite side. Finally, not the least of the analogies between the Stratum XV house and its present archetype is their orientation, which finds both presenting their walls to the cardinal points of the compass.

Though the two buildings of Strata XV and XVI thus agree in such fundamentals as ground plan, size, and orientation, the present structure did have one important additional feature. This was the decoration of its northern wall with a white plaster on which was painted a design consisting of rows of connected lozenges, the rows alternating in color between red and black (cf. Plate XLI.a, where the fresco appears as a black line on the wall, directly in front of the workman). Each lozenge within the rows measured about 7cm. in length and four in height, the combination of the red and black lozenges against the white background being particularly effective. Only a few centimetres of the fresco could be recovered, close to the base of this wall, so that it is not known whether the whole interior was so decorated, but its mere occurrence in Stratum XVI is instructive. Together with the carefully designed plan of the building in which it was found, it not only demonstrates that the people of this period were excellent artists and architects and can therefore scarcely be described as primitive, but that the wall painting found in the acropolis of Stratum XIII only represents the re-employment of an artistic device which may have been ancient even in Stratum XVI times.

North of this building, in Squares 4-5, G-J, was a structure formed of Rooms 15-17 and 21-25 (Plate XLI.b). Though large and thick-walled, this compound has no formal ground plan and would be devoid of interest if it were not for the circular kiln, No. 25, attached to its northeastern corner. Many details of its construction had been destroyed, but it was determined that the base of the kiln was situated well below the floor of the level, where masses of fused clay imbedded in light gray ashes were discovered. It was clearly an underground kiln, and the appearance of this type in so early a level (which was confirmed by the discovery of an even more complete example in Square 5-S) bespeaks great technical advancement. The house to which the kiln was attached may, consequently, have been the home of the potter; in this connection, the long, narrow rooms numbered 23 and 24 on the plan were more probably storerooms for the finished products of the kiln than living quarters.

The remaining constructions on the eastern peak of Stratum XVI comprise three private houses of different architecture. The only noteworthy details of these are the sprawling plan of the house formed by Rooms 27-31, and the two infant burials lying below the floors of the same building (p. 105). The largest house of the occupation lay on the northern peak, in Squares 4-Q and 4-O, and measured 8.00 x 7.50m. Formed of Rooms 57 and 58, 60-64, and 67, it was featured by a square plan, from which the antechamber, Room 64, projected and by long, narrow rooms. Another interesting detail is the arrangement of the doorways into Rooms 58, 61, and 62, which were set into the walls so that they screened each other. This building was definitely used in both Strata XVI and XV-A, and it is even possible that it was still standing at the time of the construction of Stratum XV, for all XV walls terminate abruptly in Squares 4-Q and 4-O where they would encroach on its location. It thus forms one of the strongest architectural ties linking together the three strata of the present group and, moreover, shows that those strata represent a comparatively short, though unbroken period of time.

Elsewhere, the northern peak was occupied only by the groups of long storage bins so typical of Strata XV-XVI, and by two isolated rooms, Nos. 80 and

74. In the eastern corner of Square 5-S, however, was a large kiln of interesting construction, and in an excellent state of preservation (Plate XLII.a). The top courses of brick forming this kiln appeared to lean inwards, so it is possible that it was originally domed, and perhaps completely closed. Some twenty centimetres below the existing top was a grating, pierced by eleven holes arranged around a larger central vent. At this point the inside diameter of the kiln was 1.10m., while the grating was 18cm. thick. Below the kiln a circular hole had been dug, having a diameter of about 85cm. and a depth of 65cm. At its northern base on the floor of Stratum XVI was a small door, directly below which a small circular receptacle had been built of *pisé*. Closely adjoining on the eastern and southern sides were two smaller ovens of more common type.

The presence of these two large kilns of a unique type in Stratum XVI, the frequent occurrence of storage bins and ovens in all three of the present levels, and the absence of sanctuaries show that the acropolis of Stratum XIII was preceded by a period when Gawra, to the best of our knowledge, was devoted exclusively to the secular. While the acropolis of XIII is even more remarkable when this fact is considered, since it must represent a religious renaissance of considerable force, the dedication of Gawra to religion did not begin with that level. With Stratum XVII we again return to occupations dominated by sacred edifices, so that the religious tradition of Gawra may be said to extend back into the earliest deposits investigated on the mound so far.

F. STRATA XVII-XX

(PLATES XVIII-XX, XLII.b, XLIII-XLV)

Four strata compose this, the earliest stratigraphic group yet discovered at Gawra. Though these occupations are firmly united by the occurrence of unusual circular buildings (heretofore found only at neighboring Arpachiyah) in the terminal strata of XVII and XX, and by identically planned temples in the middle levels of XVIII and XIX, this architectural evidence is unconfirmed by the testimony of pottery and other artifacts from the same building levels. The material products of the contemporaneous inhabitants of Gawra show Stratum XX

to have represented an earlier and markedly different culture, while Strata XVII, XVIII and XIX, on the other hand, clearly belong to the civilization represented by all overlying levels through Stratum XII. The flat contradiction offered by the different types of evidence does not, however, pose an insoluble problem. On the contrary, it demonstrates that the periods overlap culturally, the later one having borrowed architectural elements characteristic of the earlier, at the same time syncretizing those loan elements with their own typical material products.

Before attempting a detailed description of the individual occupations, it should be called to attention that beginning with Stratum XVII a much smaller area of the mound was selected for excavation. The reasons for such a decision have been given in the introduction to this work (p. 2); it will suffice here to say that the sector investigated in Strata XVIII and XIX measured approximately 25 metres square, near the eastern edge of the mound, while nearly double that area was excavated in Stratum XVII. The excavations had only begun their preliminary probings into Stratum XX when the last season's work came to an end, but these uncovered the *tholos* of that level, thus establishing the architectural unity of the levels under discussion.

Stratum XVII (Plates XVIII, XLII.b). The buildings of XVII, in the excavated eastern and northeastern sector which measured roughly 45 x 25m., formed three distinct groups. Two of these groups lay rather close to each other on the eastern edge, while the third occupied Squares 3-O and 4-O more than ten metres to the northwest. Such a division of the constructions of Gawra was typical of Strata XV through XVI, where two peaks separated by a central depression formed a topographic feature, but the present stratum was not so characterized. To be sure, Rooms 38-53 in Squares 3-O and 4-O were higher than the contemporaneous structures on the eastern rim of Gawra,³¹ but this involved a mere 30 to 35cm. However, the absence of any

structures in the M and part of K squares of XVII undoubtedly contributed to the creation of the peaks of XVI and overlying levels, though why that area was not occupied in the present occupation is not now clear.

The complex in Squares 3-O and 4-O was formed of a compact series of small rooms enclosed at the south and east by a right-angled wall. The western end of this group was not cleared, but it is probable that additional rooms lie to the west, perhaps forming a single large house similar to the one uncovered in Stratum XIX, in Squares 3-5, K and J (Plate XLIV.a). The present complex is, however, otherwise uninteresting, its plan having no regularity or architectural features.

The more important structures of XVII lay within the limits of the sounding area, on or close to the eastern edge of the mound. Rooms 1-19 in Squares 5-G and 5-J, as well as Room 37 in Square 4-K and Rooms 23-35 in Squares 3-G and 3-J, are secular constructions as shown by their lack of symmetry and by their small size. The first-named group, in the southern corner of the sounding, undoubtedly extends farther to the southeast and southwest, and may be part of a complex similar to that in Squares 3-O and 4-O. Rooms 23-35 are architecturally undistinguished, but were characterized by eleven graves dug beneath their floors, most of them below Rooms 23, 34, and 35. As there is nothing in the character of these building remains to suggest an attraction for burials, it is probable that these graves, like most others originating in Stratum XVII were so located because of the proximity of the buildings with circular ground plans.

Two circular buildings, or *tholoi*, were discovered, of which the southern one (Square 5-J) was incomplete, less than half of it being extant. The circular exterior wall was about 30cm. thick and had a probable inside diameter of 4.25m. At the south was a break in the curved wall about 60cm. wide, but it is doubtful if this represents the entrance to the structure, as it lay too close to adjoining buildings. Since the adjoining corner of Room 19 is

³¹ No elevations for the northwest rooms of Stratum XVII are available. However, a few objects found in these rooms were recorded as having elevations around 4.25m., which would thus place them (if they had been found on or near the floors) some 30cm. or slightly more

above the floors of the closest XVII rooms to the southeast. Field photographs also show a slight slope to the southeast from the squares in question.

likewise missing, it is more probable that both breaks were the result of some excavation by inhabitants of a later level. Within the tholos were three irregularly spaced piers set at right angles to the curved exterior wall. As this building, and all other Gawra tholoi, were almost certainly domical, beehive-shaped, or conical since the circular ground plan can hardly have permitted a flat-roofed type of construction,³² it is probable that these interior piers served as buttresses, assuming the upper walls also to have been constructed of mud-brick. "On the other hand, they could be supports for a council bench, or the bases for timbers rising vertically, around which were woven wattles, daubed with clay, to effect a light, weather-proof construction. (C. B.)" No doorway was discovered, but one undoubtedly existed in the missing section of the tholos.

The second tholos of Stratum XVII lay in Squares 3-J and 3-K, and was in a far better state of preservation than its counterpart of the south (Plate XLII.b). Irregularly circular in ground plan, it had a maximum inside diameter of 4.50m.; its exterior wall, like that of the Southern Tholos, was 30cm. thick. Five piers or buttresses, some of which were 60cm. in depth, were placed at intervals against the interior surface of the wall, and it is possible that a sixth had been situated against the southern section of wall which was destroyed by the shaft of a grave (Locus 7-42) sunk from Stratum XV. The unique architectural feature of the Northern Tholos, however, is the doorway in its southern wall. This consisted of an extremely narrow opening, about 30cm. wide, which was flanked on the outside by a wall about 50cm. long on each side. This doorway, if it may be termed such, was thus narrow to the point of impracticality, nor is it clear why the short exterior flanking walls were

necessary. Possibly the latter recall the long ante-chambers of some of the Arpachiyān tholoi and are to be interpreted as a vestigial survival of that feature.

As to the character of the tholoi, it is suggestive that they and formal temples have not been found side by side in any level of the present group, the tholoi occurring in Strata XVII and XX, and the conventional temples in XVIII and XIX. Of course this fact does not prove, *a priori*, that a religious nature is to be granted the tholoi, particularly since we are now dealing with small sections of occupation levels, rather than with complete strata. But even if the stratigraphic separation of tholoi and temples is considered fortuitous, it must still be explained why they occupy identical locations in their respective levels, the Southern Tholos of XVII, and the Temples of XVIII and XIX, all having successively overlain the Stratum XX Tholos. Here would seem to be clear evidence that the southwestern portion of the sounding area, notably Square 5-J, was regarded as a sacred precinct in all four of the present levels, and that the tholoi must, consequently, be regarded as religious edifices. Leading to the same conclusion is the fact that two unfurnished graves had been excavated from within the Southern Tholos, while three, similarly barren of objects, lay below the floor of its northern counterpart (Chapter III, p. 105). Unfortunately, there is no direct architectural evidence available at present to confirm these clues pointing to a sacred character of the Gawra tholoi, for only a few courses of the mud-bricks forming their walls had been preserved, and no objects were discovered on their floors. Nevertheless, no other interpretation of their function would be plausible at this time.

Stratum XVIII (Plates XIX, XLIII). This stratum was the first to be excavated entirely within the limits of the 25m. square sounding area on the eastern edge of the mound (Plate XLIII.a). Within this sounding, a Temple was discovered in the southwest corner (Square 5-J), and a larger complex of shapeless rooms and ovens without coherent plan, occupying the northern quarter of the excavated sector. Aside from these structures, only a small group of rooms (Nos. 8-11) in

³² This apparently contradicts the assumption made in the description of Stratum XI-A that the Round House of that level, with which the tholoi have no connection, had a flat roof. Although the Round House was much larger than any of the tholoi, a flat roof for that structure was entirely feasible because of its inner dividing walls which would have served to support it. Moreover, Mallowan discovered part of the springing of the dome in one of the Arpachiyān tholoi; cf. *Ar.*, p. 27.

Square 3-G, and a single room (No. 36) in the western corner were uncovered. The latter, however, extends farther to the west into unexcavated territory, and may be part of a large complex.

The secular constructions of Stratum XVIII have no major points of interest, their only noteworthy details consisting of the thick walls in Squares 3-K, 4-K, and 4-J, and the five elliptical ovens of Square 4-J. In fact, the presence of a large Temple in the closely adjoining Square 5-J is surprising, for if judged solely by their dwellings, the inhabitants of Stratum XVIII would scarcely be credited with the architectural ability necessary to the creation of a large and well-planned, formal edifice. The extant portion of that Temple measured 10.50 x 7.00m., but its full length could not be determined, as it may have extended at the west, as at its southwestern corner, into the excavation scarp (Plate XLIII.b). The plan of the Temple is not quite clear, for in addition to being incompletely uncovered, there appears to have been some rebuilding of its forepart. But it is plain that it was characterized by a long central chamber (Room 16), on either side of which were smaller auxiliary rooms. The religious character of the edifice is established by a rectangular podium located slightly to the rear of the central chamber, or sanctum. This was 1.50m. long, 95cm. wide, and 6cm. high, and was made of *pisé*. Three rooms (Nos. 17, 18 and 20) flanked the central chamber on its northern side. Of these, Rooms 17 and 20 were small and square, while the middle one was large and was subdivided by a short cross-wall. On the southern side of the structure, Room 15 exactly duplicated No. 18 in size and shape, and even possessed a short cross-wall similar to that within its northern counterpart. In the southwest corner, part of a small room was cleared which apparently balanced Room 17 on the opposite side, but in the extant remains there does not seem to be any room equal to Room 20 in the northeast corner. It is highly probable, however, that as originally planned, Room 14 had been no wider than Room 15 at its rear, so that with Room 20 it may have framed an entrance porch or *iwān* directly into the cult chamber. This assumption may be borne out by the walls of Room 19 in front of the sanctum which have no relation to the

plan of the remainder of the structure, and are most likely late constructions in what may have been at first a clear area. On the other hand, it is possible that a room originally existed directly in front of the cult chamber which served as an antechamber, and contained the main entrance to the building. It is an odd fact that this Temple, as excavated, contained not a single doorway in any of its walls, for the opening in the wall between the sanctum and Room 19 does not represent an entrance, but was instead a break made by the shafts of two graves (Loci 7-40 and 7-75) dug from the floor of the overlying Stratum XVII Southern Tholos. Yet, whether this entrance lay within a *iwān*, or whether it led through an antechamber, it seems reasonably certain that access to the edifice was gained through its short eastern side, though positive confirmation will be lacking until the western and southwestern parts of the structure can be cleared.

Other details of the Temple to be noted are the three simple piers or buttresses on the face of its northern wall which were apparently structural, rather than ornamental in function, and its orientation which finds its walls and not its corners presented to the cardinal points of the compass. Finally, it should be observed that no graves were found beneath the floors of the Temple, although five burials had been located nearby.

It is apparent from the foregoing description that the Temple of Stratum XVIII closely resembles the religious sanctuaries of Strata VIII through XI-A. Such fundamental architectural features as long axes, central sancta flanked by smaller rooms on both sides, and entrances through the short sides are shared by all those buildings. In addition, the podium of the Stratum XVIII Temple finds analogues in the Temples of VIII, IX, and XI, while the elaborate decorative piers of those later structures may have developed from the simpler structural piers of the present edifice. These details are too numerous and too identical to have been the result of accident; they must represent a definite tradition. In contrast, however, none of these basic architectural elements is embodied in the units of the Stratum XIII acropolis. There, entrance to the Temples had to be made in all cases through the

long sides of the structures; the sanctum (in the Central Temple at least) was at the rear; no podia were found; and there was greater dependence on wall decoration not only on the exterior but on the interior as well. Only the orientation of the Stratum XIII Temples agrees with that of later sanctuaries, while the alignment of the walls of the XVIII Temple to the points of the compass is duplicated in the secular buildings of XVI and XV, but is then abandoned.

If we anticipate the conclusion reached in the next few pages, where the Temple of Stratum XIX is found to have a plan almost identical with that of the XVIII Temple now being considered, the situation may then be summarized as follows: The long and tenacious tradition of sacred architecture begun in Stratum XIX was powerful enough to survive two breaks in its history. The first occurred in Stratum XVII, where a reversion to an older architectural type, represented by the tholoi, was made. The second is found in Stratum XIII, where a totally different variety of temple building establishes itself after a lengthy period when religious sanctuaries were absent from Gawra. While the Stratum XIII Temples represent fully developed types, they cannot be traced back to earlier Gawra structures, and must, therefore, have been imported. This iconoclastic, foreign importation is almost immediately superseded in Stratum XI-A by the bearers of a new culture who, however, restore the architectural form of Strata XVIII and XIX and steadfastly maintain it to the end of Stratum VIII, where still another prehistoric period begins.

From this bare recital of the history of Gawra temple architecture one fact stands out. Whatever ethnic and cultural differences may be represented in the sudden and perhaps violent change in civilization that took place in Stratum XI-A, the bearers of the new culture merely re-established at Gawra an old architectural form which had last been seen in Stratum XVIII, and had seemingly been superseded by temples of radically different plan in Stratum XIII. An explanation or interpretation of this paradox is a task not to be ventured upon now, but it constitutes a problem of the greatest interest and importance.

Stratum XIX (Plates XX, XLIV). The sound-

ing area had been more heavily occupied in Stratum XIX than in any of the immediately overlying levels but, as in XVIII, the northern sector contained only secular buildings while the southern part was occupied by a Temple. There was an even more distinct relationship between the locations of all buildings of Stratum XVIII and those of the present level. A large part of the XVIII Temple, for example, was directly superimposed upon the ruins of the earlier sanctuary, while Rooms 22-35 of XVIII had been built over the northeastern half of the larger complex formed by Rooms 32-47, 49, and 51 of Stratum XIX. That this was no mere coincidence is demonstrated by the identical orientation of these structures, and by the fact that the exterior walls of the large private dwelling in Stratum XIX governed the limits of the later complex formed by Rooms 22-35. Furthermore, only 67cm. of debris separated the floors of the two Temples, as compared to the 1.41m. between the floors of the Southern Tholos of XVII and the Stratum XVIII Temple. As it is safe to assume that the builders of XVIII must have used the town-planning constructions of XIX as their models, it then follows that there cannot have been a break of any consequence in time or in culture between the two.

The largest structure of Stratum XIX consisted of the private house located in the northern part of the sounding in Squares 3-5, J and K (Plate XLIV.a). The maximum dimensions of this building were 17.00 by 11.50m.; as such it is one of the largest yet discovered at Gawra, being exceeded only by the Round House of Stratum XI-A and possibly by the Eastern Temple of Stratum XIII. Its rooms numbered at least a dozen, well arranged at the rear and on the eastern side of a large, enclosed courtyard. Of these, Rooms 32-35 lay outside the main wall and hence were separated from the main complex to the west, but that they formed part of the house is shown by their walls which are bonded into the main wall east of Area 40, and by their floor elevations which are identical with those of the rooms to the east. The remaining rooms lay against the rear enclosing wall (Nos. 41-44), and in the center of the court (Nos. 37-39, 45-47). A wide doorway occurred in the middle

of the southern courtyard wall, while a secondary entrance was at the northwest, leading past Room 49 and around a curtain wall into Area 51 of the courtyard. Room 49 may be a late addition; it is possible that Area 48, as well as the sector west of Room 44 originally were enclosed by the exterior wall of the building which then would have had a regular, rectangular shape.

The appearance of such a large, well-planned secular building in Stratum XIX bears out the fact, independently attested to by the neighboring Temple, that even so early as the present level the architectural ability and skill of its inhabitants had already reached a high plane. Nor do the remaining secular constructions of XIX disappoint us in this respect. The next complex of private rooms, formed by Nos. 21 and 23-30, were likewise well planned and well constructed and lay on the northeastern side of a street or court (Area 31) 10.50m. long and 4.00m. wide. Unquestionably, these rooms formed part of a larger group which extended under the northern excavation scarp, so that we may have in them a rival, in size and in regularity of plan, to the house with forecourt just described. Their floor levels, however, were the highest of the stratum. A third group of rooms, Nos. 7 and 16-18, lay in Squares 4-G and 4-J. These have less to recommend them, being irregularly shaped and without notable plan. One feature found in this group and, for that matter, in all constructions of Stratum XIX, are simple piers or buttresses, which seem to have been employed extensively for structural reasons.

The Temple of XIX lay in Squares 5-J and 5-G (Plate XLIV.b). It was poorly preserved, perhaps as the result of the superposition of the XVIII Temple upon it, but as in that later building it also seems to have suffered some later rebuilding and alteration. Its exterior walls, in particular, had largely disappeared, but the edifice was clearly characterized by a long sanctum (Room 11) measuring 8.15 x 3.00m., on both sides of which small flanking rooms may be noted. Three of the latter (Rooms 1-3) lay on the southern side of the central cult chamber; on the north only two rooms remained (Nos. 12 and 14). On the floor of the sanctum, but closer to its eastern end, was a

rectangular podium made of *pisé*, 95cm. long and 55cm. wide. The southwest corner of the sanctum, as well as the area directly behind it, could not be cleared since these lay in the scarp formed by the excavations of later levels. However, a short prolongation of the northern wall of the cult chamber was found at its rear, which may indicate the presence here of a cella. The northern ancillary rooms, Nos. 12 and 14, were connected by means of a doorway; in addition, a doorway connected the sanctum and Room 1 at the southern corner of the structure.

The possibility must, therefore, be allowed that the entrance to the Temple itself lay somewhere at the west, perhaps through Room 1 as an antechamber. If so, the present building would differ radically from the Temple of XVIII whose entrance was presumed to have existed at the east, possibly through an entrance court or porch, or through an antechamber. But it is difficult to accept the doorway from Room 1 as the main entrance into the sanctum. The front of the building is more decisively shown to be at the east where a threshold of stones lay before a doorway into Room 14, and where there appeared to be a street or court consisting of Area 15, and the area directly in front of the building later occupied by Rooms 4, 5, and 7-9. The floor of Room 9, for example, was 36cm. higher than that of the sanctum, so it is almost certainly later; possibly all these walls had been erected only after the Temple had fallen into disuse. In fact, Room 10 would seem to have served as an antechamber to the sanctum prior to the construction of Rooms 7 and 9, but whether this was flanked by a small room on either side (as Room 19 of the XVIII Temple was bordered by Nos. 14 and 20) cannot now be ascertained.

On the basis of available evidence, therefore, the most plausible interpretation of the extant walls of the Stratum XIX Temple is that the main entrance to the building lay at the east, through a small antechamber lying directly in front of the sanctum. Unequivocal proof of this is lacking, however, owing to later alterations, the disappearance of key walls, and because of the unexcavated southwestern corner. It is more likely that, like the overlying sanctuary of XVIII, it was featured by a long central

sanctum, in which was a rectangular podium, that room having smaller enclosures along both its long sides. Again like the Temple of XVIII, it was oriented with its sides to the main points of the compass, and it possessed at least one simple pier or buttress on the exterior surface of its northern wall (Area 13). Whether any graves had been associated with the Temple, or with any other buildings of XIX, could not be determined because if they do exist they would lie in still lower unexcavated strata.

It scarcely need be stressed that the Stratum XIX Temple was almost an exact replica of the Temple of XVIII. In all important respects of plan, architectural detail, and orientation they are so similar that it cannot be doubted that the Stratum XVIII Temple was a copy of its predecessor or, stated in other terms, a slightly later example of the same architectural tradition. That tradition unaccountably lay dormant at Gawra after Stratum XVIII for a period represented by eight levels, but was resurgent in Stratum XI-A and became the characteristic architectural feature of the cultural period begun in that level. Whether additional Temples of the same type lie in earlier unexplored levels of Gawra is unknown, but it is certain that the Stratum XIX Temple represents the oldest religious structure of its kind yet discovered at Gawra or elsewhere.

Stratum XX (Plate XLV). Only a few preliminary trenches in search of walls had been excavated in the débris of Stratum XX when excavations had to be concluded. However, because the southwestern side of the sounding had been the location of successive religious edifices in Strata XVII, XVIII, and XIX, this sector was naturally one of the first to be investigated in the present level, and its excavators were rewarded by the discovery of a tholos, similar to the ones found in Stratum XVII. While this proved to be the only building that it was possible to uncover, the excavations in XX proved to be gratifyingly successful. The pottery of this stratum demonstrated conclusively that still another prehistoric period had been reached, the characteristic wares now being polychrome as contrasted to the typical monochrome pottery of Strata XIX through XII. Moreover, the presence of a

tholos provided a prototype for the Stratum XVII tholoi, and conclusively showed that, despite the difference in their pottery, the two strata had been bound by a common architectural tradition.

The tholos of Stratum XX lay against the southwestern scarp of the sounding (Plate XLV), in the southern corner of Square 5-J. It thus occupied a position directly below the western end of the Stratum XIX Temple, whose floor, however, was separated from the floor of the tholos by over a metre of débris. It measured circa 5.00 to 5.25m. in exterior diameter, the walls being relatively thin.³³ Three irregularly spaced buttresses were on the interior, one of these having been preserved to a height of close to one metre. This fact, coupled with the small number of buttresses, shows that in this instance, at least, they could not have served as the supports of a council bench as was suggested in the description of the Southern Tholos of XVII (p. 43), but must have had some structural function. The entrance to the tholos lay at the northwest, and was considerably wider than that of the Stratum XVII Northern Tholos. Moreover, it seems to have been of a different type, for instead of the two narrow, flanking walls set at right angles to the entrance to that later building, the present structure featured a somewhat wider hall or antechamber tangent to the doorway. Unfortunately, this could not be completely traced, for it led into the excavation scarp; however, additional short walls projected from the exterior wall of this antechamber, while two other walls leading from the scarp joined up with the southern wall of the tholos. The presence of these walls is puzzling, for they seem to suggest that the tholos was part of a larger complex, or that other buildings of the stratum had been permitted to share the exterior walls of the tholos. At any rate, they contrast with the isolated and free position of the tholoi of Stratum XVII.

A few other walls of Stratum XX had been located, but not completely traced when work had to be suspended. So far as revealed they were of no particular importance, but they did provide one detail of interest. "The bricks forming them were

³³ No actual elevations, measurements, or plans of this tholos were made; the figures specified in the above description are estimates based on field photographs.

the smallest yet discovered, measuring as a rule about 13 x 9 x 5cm." (C.B.)

G. THE SOUNDINGS AT THE FOOT OF THE
MOUND: AREA A AND THE NORTHEAST BASE
(PLATES XXI, C)

The survey of the building remains of Strata IX through XX has now been completed. While Stratum XX represents the earliest occupation level yet reached at Gawra by systematic excavation of the mound, it is evident that many more strata still lie underneath that level. Several metres of debris separate the floor level of Stratum XX from the level of the surrounding plain, and this interposed deposit undoubtedly contains many additional chapters in the history of Gawra. Proof of the presence of remains earlier than Stratum XX was obtained during the sixth excavation season when, in order to provide areas for dumping purposes which would be free of archaeological material, it was decided to excavate sections at the foot of the mound down to virgin soil. Two widely separated areas were selected; one at the southeast foot of Gawra designated as Area A, and the other at its northeast base, which was called by that name (Plate XXI). The latter, which lay in Squares 1-I, K-M, measured approximately ten by fifteen metres and was architecturally barren, not a single wall having been discovered within it. Only a thin layer of debris containing pottery fragments and a few other objects dating to the so-called Tell Halaf period lay immediately over virgin soil, so that work here was soon brought to a close.

Area A was situated within Squares 5-6, A-bb (Plate XXI), and measured 14.50 x 8.00m. Like the Northeast Base, this particular sector had been uninhabited and contained no building remains, but it did otherwise possess several interesting features. It had, apparently, been used extensively as a dumping ground by the inhabitants of Gawra during the so-called Tell Halaf period, for the virgin soil was here overlaid with from three to six metres of debris. Much of this, particularly in the end of Area A closest to the slopes of the mound, consisted of soil which had been washed down the sides of Gawra, but the lowest two to three metres of this deposit was rich in pottery fragments and other

objects of the Halaf type. Since this pottery appears to be earlier than the wares of the same period encountered in Stratum XX, it must have been produced by the inhabitants of still earlier levels (cf. Chapter IV, p. 132).

Because of the lack of building remains, no sharp lines of stratification could be observed in the deposits; nevertheless the debris occurred in six roughly separated layers. These were designated by the letters A to F, of which A was the uppermost. Level B occurred roughly at a —2.96m. level, Level C at —3.61m., Levels D and E close to —4.25 and —4.35m., and Level F at —4.74m. All these levels, however, could not be traced in all portions of the cut, so that numerous objects from Area A have no level designation. But this fact detracts in no way from the stratification where it could be observed, and is entirely the result of the character of the deposits which, as was indicated above, were formed by dumping operations from the mound itself, and were not the remains of definite occupations within Area A.

Virgin soil was reached at an elevation of —5.22m. in Square 6-A, and —5.13m. in Square 5-bb. The total depth of occupational deposits at Gawra thus amounts to 27.22m.; this figure, of course, may vary in different parts of the site, but is probably close to that average. If the six layers of Area A each represent a stratum yet to be excavated below Stratum XX, that figure when added to the twenty-four levels and sub-levels uncovered on the mound to date would yield a total of thirty Gawra strata. While it is entirely possible that six strata are to be found within the approximately six metres of debris lying between the floors of Stratum XX and virgin soil, it serves no purpose to speculate further on the matter since the question can hardly be resolved by any means other than actual excavation.

Three graves were uncovered in Area A, one in Level F and the others 20 to 30cm. below that level. The most significant feature of Area A, however, was a pit, sunk into virgin soil in the extreme eastern corner of the cut. That pit was exactly five metres in depth and was filled with a clean, brown soil to a height of 1.60m. above the floor, above which the filling was darker in color and less uni-

form in texture. This, together with the fact that potsherds found near its floor were soft and patinated as if from lengthy submersion, shows that the pit had originally been excavated for use as a well or cistern. Roughly bottle-shaped, its greatest diameter was 3.10m. at a point close to its middle. The mouth of the Well lay about 75 cm. below Level F, and was oval in shape, measuring 1.20 x 1.50m. The floor was slightly concave.

Some time after its excavation, perhaps when it was beginning to fill up with soil washed down from surrounding slopes, the Well lost its original function and came to be used as a burial pit. A total of twenty-four skeletons were found within it, at four different levels from 2.00 to 3.70m. below its mouth. The uppermost burial (Burial A) was that of two adults, lying almost directly underneath the mouth of the Well and two metres below it (Plate C.a). One of these skeletons may have been formally interred, for it lay on the left side, with the legs tightly contracted, and the hands raised to the face. Between the elbows and knees were the impressions of several wooden poles, while additional impressions were found beneath the skeleton. The second skeleton in Burial A lay sprawled and prone almost at right angles to its slightly higher companion and, judging from its position, had apparently been cast down the shaft of the Well. At the level of this burial were several animal bones and the jar fragment illustrated on Plate CIX, Fig. 3. Directly above this burial, Fig. 7 of the same plate, a bowl, was found.

Burial B, the next lower interment, lay 3.10m. below the mouth of the Well and consisted of twelve adults (Plate C.b). All these skeletons lay in grotesque positions, and were scattered over the entire area of the pit without orientation, and without formal arrangement of the limbs. It is probable, therefore, that they had simply been thrown into the Well, particularly since most of them had their bones intermingled. With this burial was found a squat, lug-handled jar (Plate CIX, Fig. 4), two tanged stone pendants (Plate CLXXII, Fig. 30, and Plate CLXXIII, Fig. 32), and an unillustrated basalt pestle which may be seen near the center of Plate C.b. The skull in the center of the same plate is described by Dr.

Krogman in Chapter XI; it was the only skull of the twenty-four found within the Well which was recoverable for study.

Directly beneath Burial B, about 3.30m. below the mouth of the Well, nine more adult skeletons were found which were designated as Burial C. Most of these lay near the walls of the Well, and like the superimposed skeletons of Burial B had apparently been thrown down the shaft, for no orientation or arrangement of the bones could be noted, while some skeletons overlaid others. No objects were found with this interment, but 10 or 15cm. below the level of the skeletons a large painted bowl and a painted jar were discovered (Plate CIX, Figs. 6 and 9). Like the skeletons themselves, these seem to have been dropped down the shaft, for their sherds were widely scattered.

The last burial (D) lay 3.70m. below the mouth of the Well. This consisted of a single young adult lying directly under the mouth of the pit. Again, no formal interment is suggested, for the skeleton was contorted and was unaccompanied by any objects. Forty centimetres below Burial D, and 4.10m. below the mouth of the Well were two jars, illustrated on Plate CIX, Figs. 1 and 2, while a jar and a bowl (*ibid.*, Figs. 5 and 8) were discovered at a depth of 4.50m., or only fifty centimetres above the bottom of the Well.

It will be seen from the foregoing description that all burials except Burial A, and all objects except the four pottery vessels discovered below the level of Burial D, were found in the 60cm. of débris lying between 3.10 and 3.70m. below the Well's mouth. As the clean brown soil referred to earlier in this account filled the lower part of the Well up to a point 3.40m. below its mouth, it is thus possible to surmise that this was deposited when the Well was used as such, but that when the brown fill had reached the 3.40m. level the Well lost its usefulness, and Burials D, C, and B were made within it. Consequently, the Well must have been in use for at least a few years before any interments were made, and the four vessels found below Burial D must be that much earlier than any others from the Well. Burials D, C, and B had followed all within a short time of each other, and were then covered with over a metre of débris

before Burial A was made. Immediately after that last interment, it is probable that the remaining two metres of the Well were filled in, and its location forgotten.

No satisfactory explanation of the mass interments of Burials C and B can now be ventured. The brusque manner of disposal of the bodies shows that these persons had been held in little regard, and that they were not deemed worthy of proper burial. It is thus possible that the twenty-one persons in those burials fell in battle, and that they had been rudely cast into the Well by their conquerors. How-

ever, no crushed skulls or other marks of violence in the bones could be noted, and the identification by Dr. Krogman of the skull described in Chapter XI as female would seem to point away from such a conclusion. It is even more certain that they cannot have been sacrificial, for a more appropriate spot than a disused Well would have been found for their interment, and there would have been more formality in the burials, and perhaps accompanying gifts. More likely they were the victims of famine or plague, but there is no decisive evidence to support this theory.

II. TOMBS

(PLATES XXII-XXVII; XLVI-LIX; CIII-CVIII)

In addition to the more numerous graves which will be described in Chapter III, eighty tombs were discovered. These tombs have been distinguished and separated from the simpler graves for the following reasons. First, they represent an elaborate and different type of burial, in which an enclosure was constructed either of *libn* (sun-dried mud-brick), or of stone, or of a combination of both materials. This enclosure, or tomb, was moreover often roofed with mud-bricks, matting, stone slabs, or wood. Second, unlike the simple graves, which were found in almost all levels of the mound, as well as in Area A at its foot, these tombs were discovered only in Strata IX through XIII, and are thus a type of burial characteristic of only a limited period in the history of Tepe Gawra. Third, a number of the mud-brick tombs contained rich collections of objects; these burial furnishings have few parallels with the objects discovered in occupational debris. Fourth, and largely as a result of the factor just mentioned, the stratum or strata in which the builders of these tombs lived have, up to the present time, remained unidentified, and the tombs thus represent one of the major stratigraphic problems encountered at Gawra.

The present chapter has been organized into four main sections, dealing respectively with: (A) the stratigraphic origin of these tombs; (B) details of their construction; (C) a description of the skeletal remains contained by the tombs, together with notes on the burial customs they illustrate; and finally, (D) a description of the funerary furnishings. Following this outline we may now proceed to a discussion of the most difficult aspect of the tombs, viz., the problem of identifying their builders and relating them to definite strata.

A. THE STRATIGRAPHIC PROBLEM (PLATES XXII, XXIII, XLVI.a)

Late Tombs (Plate XXII). It has been suggested by the actual excavator of most of the tombs that they contained the dead of a people inhabiting

some locality near Gawra, at a time (between Strata IX and VIII-C) when Gawra was unoccupied.¹ Certain objections may be made to this view. In the first place, there is no site within a radius of a few miles of Gawra that was large enough in the period represented by the tombs to have accounted for their presence, and it is difficult to believe that any large site still more distant (as for example, Nineveh), can be held responsible. If, on the other hand, nomads are accounted as the people who constructed these tombs, they must have had a rich material culture, far exceeding that of the inhabitants of Gawra and other North Mesopotamian sites in this period. Furthermore, such a culture is not usually associated with nomadic peoples. Lastly, there is no evidence of any considerable period of time having elapsed between the abandonment of Stratum IX and the construction of Stratum VIII; on the contrary, the evidence points to an unusually brief interval.² In view of these objections it seems more reasonable, if indeed not actually necessary, to assume that the builders of the tombs had been inhabitants of Gawra at some period. If so, it would then follow that they must be connected with some level or levels of the mound.

The problem of connecting these tombs with known occupational levels is extremely difficult because only a few parallels may be drawn between objects from the tombs and those found in the debris of overlying strata. It is this fact which constitutes the greatest attraction of the theory discussed in the preceding paragraph; namely, that the tombs and their furnishings are the products of a people foreign to Gawra. To be sure, some relationships may be established between objects from the tombs and those from occupational debris of Gawra building

¹ Charles Bache, "Prehistoric Burials of Tepe Gawra," *S.A.*, Vol. 153, No. 6 (Dec. 1935), pp. 310-313. The deepest, and hence the earliest tombs, however, namely those in Strata XI-A, XII, and XIII, had not yet been discovered.

² Cf. Chapter I, p. 7; also *T.G.*, p. 27: "... Stratum VIII is primarily the continuation of an established civilization after a brief break following the destruction of Stratum IX."

levels and graves. While these analogies furnish additional arguments to the effect that the tombs were the products of Gawrans, they are, unfortunately, not numerous or specific enough to provide positive evidence as to particular stratigraphic sources. For the most part, the tombs have yielded objects which are either unduplicated by those recovered from occupational debris (e.g., gold rosettes, pendants, and studs; ivory combs; ivory pins; etc.), or other types of objects having no value in narrow relative dating, such as beads. Pottery vessels and seals—the most valuable comparative media—are, on the other hand, uncommon as tomb furnishings. As a result, the evidence obtained from a study of the funerary equipment of the tombs may only be used to check the possible stratigraphic sources suggested by other methods, but is in itself inconclusive.

Let us examine still further the theory that the tombs contain the physical and material remains of a people who lived near Gawra, and who, presumably because of the sanctity of our site, chose to bury their dead on the mound of Gawra at a time when it was crowned only by the deserted and ruined buildings of Stratum IX. A necessary consequence of this theory would be that the floor levels of the tombs would occur, within reasonable limits, at approximately the same depth, since the tombs are assumed to have originated at about the same height above the plain. The third column of Table A, on page 54, lists the elevations of the floors of all tombs appearing on Plate XXII, but does not include the deepest tombs discovered in Strata XII and XIII, for which no elevations are extant. It may be seen, however, from a glance at that table that the elevations of the tomb floors range from 9.30m. above the zero point to 12.13m.; a difference of close to three metres. This difference would be considerably widened if the exact elevations of the tombs intrusive in Strata XI-A, XII and XIII could be included; however, a rough calculation may illustrate our point. The elevation of the floor of Stratum XIII is approximately 6.50m.; as three tombs (G36-150, G36-151, and G36-155) had been sunk into Stratum XIII, their floors were therefore about this elevation. The highest tomb discovered (No. 20) had a floor elevation of 12.13m., hence the extreme range in

elevation of the tomb floors is about 5.63m., which is an impossible figure for burials from a single stratum. It is obvious on the basis of this evidence alone that not all of the tombs are to be attributed to a single stratum, or to a single interstratigraphic interval. A two- or three-metre difference in elevation could be explained if it is supposed that the buildings of Stratum IX had collapsed and formed small hummocks above the comparatively flat floor of that level. But we are not even prepared to accept this explanation, for Stratum IX was not extensively occupied; in fact, the buildings of that level covered only a little more than half of the available area of the mound. It would surely have been the flat, open area to the rear of the Stratum IX Temple which would have been selected for the location of the tombs, if they are all to be attributed to this stratum, or to an interval between Strata IX and VIII-C. Moreover, if this area had been selected, the floors of the tombs would occur at elevations which likewise would be fairly constant; certainly, a vertical range of over five metres would then be inexplicable.

The horizontal distribution of the tombs proves the contention that Stratum IX, or a period following the occupation and desertion of that stratum, cannot have been the only time when these tombs were constructed. On Plate XXII the locations of forty-five of the total of fifty-three mud-brick and stone tombs intrusive in Strata IX, X, X-A, and XI have been plotted. The tombs discovered in still lower strata appear on Plate XXIII, and will be discussed later. It will readily be seen from a glance at Plate XXII that the tombs occur in a broad, crescent-shaped belt extending from the eastern, through the northern and western sections of the mound, leaving only the southern area unoccupied. It has just been observed that, if the tombs are to be attributed only to Stratum IX, it might logically be expected that they would occur in the north-eastern and eastern half of the mound, as this part of Gawra (to the rear of the IX Temple) was unoccupied at that time. The fact that many of the tombs ignore the locations of the buildings of Stratum IX may thus be taken as the final and conclusive piece of evidence contradicting that

theory. But what does the location and distribution of the tombs then suggest?

If the first of our plans showing the distribution of the tombs (Plate XXII) is again referred to, it will be seen that the belt of tombs is not formed of an unbroken series of related units; on the contrary, the tombs occur in groups with at least five main gaps breaking their continuity. In four of these gaps, the outlines of the three temples of Stratum VIII and the single temple each of Strata IX and X have been placed in their actual locations, the Central Shrine of VIII and the Stratum IX Temple overlapping in part. A few tombs, to be sure, encroach on the limits of the temples, or are found within those buildings; a circumstance that will find an explanation later. For the most part, however, the interruptions in the series of tomb locations are filled in by the temples themselves. The significance of this fact is at once apparent. It suggests that the tombs were deliberately concentrated near certain religious buildings of Gawra, and also that the tombs are associated with the temples of at least three main strata, namely, VIII, IX, and X, and consequently must have originated in those strata. The wide range in elevation of the tomb floors, implying a multiple rather than a single stratigraphic source for the tombs, is thus confirmed by the horizontal distribution of the tombs and their association with the religious edifices of no less than three main strata.

A broad basis for the stratigraphic attribution of the whole body of tombs has now been established, but only the fact that the tombs were constructed by, and contain the remains of, Gawrans of Strata VIII, IX, and X has emerged. The specific attribution of individual tombs is a task that still remains, for at the present stage of this inquiry it cannot be stated with any degree of assurance whether Tomb 46,³ to take a single obvious example, may on the

basis of its location alone be attributed to Stratum VIII or to Stratum IX, since it lies equidistant from the Western and Central Shrines of VIII and the Temple of IX. It must be remembered, furthermore, that the Western Shrine of Stratum VIII was in use only in the C, or earliest phase of Stratum VIII,⁴ while the Central Shrine continued in use throughout all three phases. Consequently, is Tomb 46 to be considered as contemporaneous with Stratum VIII-A, VIII-B, VIII-C, or IX, since merely by association it could be related to the Western Shrine (VIII-C), the Central Shrine (VIII-A, B or C), or the Stratum IX Temple? And with which temples and strata are all other tombs to be related?

It has been found possible, by superimposing the plans of all strata containing and overlying the tombs, to determine the level or levels in which most tombs could possibly have originated. It is obvious that if walls of any stratum overlying a specific tomb cross over its location, that tomb must have been constructed before the walls had been built. Similarly, if the walls of any stratum are found to have been cut and broken directly over the location of a tomb, it follows that the shaft of that tomb is almost certainly responsible, and the tomb must therefore have originated in a still higher stratum. By employing these two principles it has been found possible in most cases to establish the limits of the stratigraphic sources of the tombs, for if a tomb should have been discovered in Stratum X, and its location is crossed by walls of Stratum VIII-B, for example, that tomb in all likelihood originated in Strata VIII-C or IX; the only intervening levels. Certain exceptions to and qualifications of this method will be pointed out later, but for the present let us examine the results arrived at by its application.

The following table lists all tombs appearing on Plate XXII, together with pertinent data. The

³ "Locus" numbers were assigned to the tombs, as well as to the graves and, in fact, to any specific point in any level of Gawra which was of interest, whether a burial, a cache of objects, an architectural detail, or any other feature worth noting. In the present chapter, however, the numbers have been retained, while the word "Tomb" has been substituted for "locus" in order to distinguish still further the tombs from simple graves. It will be noted that the tombs do not all bear the same kind of designation. In the third, fourth, and fifth seasons, the loci were given

a simple numerical designation such as 5, 102, 249, etc. In the sixth season, a new numerical series was begun, prefaced by the unit "G36-", indicating the year of excavation, while in the seventh season they bore the prefix "7-". The five tombs identified only by capital letters were not numbered in the field during the third season, and I have arbitrarily assigned these designations to them to facilitate reference.

⁴ TG., 26-27: 30-31.

EXCAVATIONS AT TEPE GAWRA

TABLE A

POSSIBLE STRATIGRAPHIC SOURCES OF THE TOMBS APPEARING ON PLATE XXII

	<i>Tomb No.</i>	<i>Elevation of Tomb Floor</i>	<i>In Stratum</i>	<i>Crossed by Walls of Stratum</i>	<i>Possible Strata of Origin</i>
Group I	61	11.13	X	VIII-A	VIII-B, C or IX
	60	11.39	X	VIII-A	VIII-B, C or IX
	16	10.72	X	VIII-A	VIII-B or C
	37	10.83	X	VIII-A	VIII-B, C or IX
	64	10.74	X	—	?
	65	10.68	X	—	?
Group II	14	11.27	X	VIII-A	VIII-B, C or IX
	7-9	10.70	X-A-	IX	X
	31	10.78	X	VIII-B	VIII-C or IX
	B	—	X	VIII-C	IX
	A	—	X	VIII-B	VIII-C or IX
Group III	57 (cist)	10.61	X	VIII-B	VIII-C or IX
	30	11.96	IX	VIII-A	VIII-B or C
	59 (cist)	—	X	VIII-A	VIII-B, C or IX
	25	—	IX	VIII-B	VIII-C
	34	—	IX	VIII-B	VIII-C
	46	—	X	VIII-A	VIII-B, C or IX
	18	11.87	IX	—	?
	20	12.13	IX	VIII-A	VIII-B or C
	C	—	X	VIII-B	VIII-C or IX
					VIII-C or IX
Group IV	29	11.74	IX	VIII-A	VIII-B or C
	34	10.25	XI	VIII-C	IX, X or X-A
	45	10.25	XI	VIII-A	VIII-B, C, IX or X
	53	11.51	X	VIII-C	IX
	54	11.80	X	IX	IX?
	E	11.33	X	VIII-C	IX
					IX
Group V	62	11.60	X	VIII-C	IX
	226	—	XI	X	X-A
	249	9.59	XI	X	X-A
	D	11.93	X	VIII-C	IX
	213 (cist)	10.86	X-A	VIII-C	IX or X
Group VI	124	9.62	XI-	—	?
	107	9.33	XI-	—	?
	102	9.30	XI-	VI	?
Group VII	111	10.02	XI	VIII-C	IX, X or X-A
	109	ca. 9.42?	XI-	VIII-C	IX, X or X-A
	114	9.42	XI-	VIII-C	IX, X or X-A
	110	9.43	XI-	VIII-A	VIII-B, C, IX, X or X-A
					IX
Group VIII	2 (cist)	11.75	X	VIII-C	IX, X or X-A
	108	10.47	XI	VIII-C	IX or X
	202 (cist)	10.82	X-A	VIII-C	IX
	5	11.67	X	VIII-C	IX
Group IX	171	—	XI	—	?
	209	11.14	X-A	VI	?
	169	9.49	XI	—	?

extreme right-hand column lists all possible stratigraphic sources for each tomb. These sources, as has been explained, are determined by listing the strata lying between the stratum into which the tomb intruded (fourth column), and the stratum whose walls first cross over the tomb location (fifth column). As the tombs were found in groups, they have been so listed in the order of their occurrence, and these groups have, for convenience in reference, been numbered. There are, however, a few tombs which are more or less isolated, and these have been inserted between the grouped tombs, again in the order of their occurrence on the plan. Our inquiry is directed at present only to the tombs discovered in Strata IX-XI; the earlier tombs, intruding into Strata XI-A-XIII will be discussed later in this chapter.

We have now determined all possible stratigraphic sources of the forty-five tombs appearing on Plate XXII. The results listed in the last column of the table are not conclusive and decisive in each instance, for some tombs still command possible sources in two or three strata, while Tomb 110, one of the important members of Group VII, may possibly have originated in any one of five different strata. Still others, such as Tombs 64, 65, 18, 226, 124, 107, 171, and 169, are not crossed by the walls of any overlying stratum; as a consequence, there is absolutely no indication as to their sources. Nevertheless certain tombs may be singled out to furnish indisputable proof as to the origin of the whole body of tombs appearing on Plate XXII in Strata VIII-B, VIII-C, IX, X, and, in two instances, in X-A.

The first of these key tombs is No. 7-9. This tomb, uncovered in Stratum X-A (Squares 9-10 M), belongs to the second group of Plate XXII and Table A. It is crossed by the fragment of a wall in Stratum IX, east of Room 917. The only possible stratigraphic source of this tomb is, therefore, in X.

Next are Nos. 24 and 25 of Group I, which form one of the two double-tombs discovered. These had been constructed at the bottom of a shaft leading into Stratum IX (Squares 9 Q-O), although the elevation of their floors is unfortunately not specified in the field records. No walls of Stratum

VIII-C cross over this double tomb, but in the next, or B-phase of Stratum VIII, walls of the small room northeast of Room 881 and immediately adjoining it cross over both ends of the tomb. This double tomb is therefore of VIII-C origin, since that is the only stratum lying between VIII-B and IX.

Group IV provides us with two tombs having definite strata of origin. These are Nos. 34 and 53, in Square 7-O. No. 53 was intrusive in Stratum X; although the floor of No. 34 rested in Stratum XI, and is therefore listed as intrusive into that stratum in Table A, the tops of the walls of this tomb reached into Stratum X, so that it must have originated in a stratum above X. As both tombs are crossed by the walls of Room 883 in Stratum VIII-C, the only stratum to which they may be assigned is, consequently, Stratum IX. In that stratum they were located near the temple, being situated north of the northern corner of Room 904, which forms an addition to the original temple building. The substantial difference in elevation between the floors of these tombs (1.26m.) may be regarded as militating against the attribution of both of them to the stratum. However, the roof of Tomb 34 was only 68cm. lower than the roof of No. 53, the former having much higher walls. Furthermore, Tomb 34 contained an adult burial and, although it had been robbed in ancient times, enough of its furnishings had been overlooked or scorned to hint at the original wealth it must have contained. Tomb 53, on the other hand, contained only the bones of an infant, undisturbed since the day of burial. The difference in elevation between these two tombs arises, therefore, because one (No. 34) was a rich burial of a presumably important personage, while the other did not require the protection that added depth would have afforded, as it contained only an infant and was completely devoid of furnishings.

Tomb E, an isolated tomb in Square 6-O, is intrusive into Stratum X. Since it is crossed by Stratum VIII-C walls, the only possible source of this tomb is in Stratum IX.

Group V in Squares 6-7 M, and just south of Tomb E discussed above, provide our next certain examples: Tombs 62, D, 226, 213, and 249. The

first two of these had been constructed at the bottom of shafts terminating in Stratum X. Both are crossed by walls of VIII-C (Room 884), so that the only possible level from which their shafts could have been dug is Stratum IX. Like Tombs 34 and 53, these burials associate themselves closely with the Temple of Stratum IX, being located directly to the rear (northeast) of that building.

Tomb 249 of the same group has a floor level from 2.00 to 2.34m. below those of Nos. 62 and D. For this reason alone a source in a stratum lower than that attributed to Nos. 62 and D would seem apparent, which is confirmed by walls of Stratum X crossing over the location of this tomb. As it was discovered in Stratum XI, the only remaining stratum from which it could have been dug is X-A.

Also to be assigned a Stratum X-A source is Tomb 226 which, like No. 249, was found in Stratum XI and is crossed by walls of Stratum X. Tomb 226 thus originated in Room 20 of Stratum X-A, while the shaft of No. 249 was begun in Room 21, immediately adjoining. We have no clue why these rooms should have been selected for the site of tomb shafts, when open areas of the X-A settlement were so readily available. Even the fact that these tombs had their source in X-A is surprising when it is recalled that no temple existed in Stratum X-A to attract burials of any type. Nevertheless, whatever the answer to this riddle may be, there can be no doubt that both 249 and 226 did indeed originate in Stratum X-A (cf. Chapter III, pp. 100-101).

Ten tombs have now been found to be related to specific strata. It will be noted that four other tombs listed in Table A (Nos. B, 54, 2 and 5) also have but a single stratum in which they could have originated. All four tombs, however, are crossed by walls of the Western and Eastern Temples of Stratum VIII, or by walls of the Stratum IX Temple. There is the possibility, therefore, that these tombs were deliberately placed underneath the foundations of their respective temple buildings as a propitiatory or ritual gesture, and that they may even contain sacrificial victims. This surmise is strengthened by the fact that all contained the bones of infants, and is confirmed by a far larger number of child burials discovered near the Western and

Eastern Temples when Stratum VIII-C was excavated,⁵ and by numerous graves, usually of infants or children, associated with the temples of almost all levels, which will be described in Chapter III. If the explanation is accepted that these four tombs, Nos. B, 54, 2, and 5, are related to the strata possessing the temple buildings rather than to underlying strata, why should not all tombs located within temple buildings, or crossed by the structures themselves, be similarly attributed to the strata possessing those buildings?

Altogether ten tombs are crossed by the walls of temples or are situated within their confines; they are Nos. 7-9, 14, B, 54, C, 108, 202, 5, 2, and 109. We have already discussed Tomb 7-9, and found it had its source in Stratum X. The reason for attributing it to that stratum was a wall fragment in Stratum IX which crossed over the site of the tomb. Consequently, it cannot be related to the Stratum VIII-C Temple lying above it, and the association of this tomb with the Western Temple must be regarded as accidental. Tomb 108 may be questioned as a sacrificial burial on different grounds. Although it is similarly located under a corner of the Eastern Temple of VIII-C as Tomb 2, which we are prepared to accept as a burial of the sacrificial type, Tomb 108 has a floor elevation of 10.47m., as contrasted with the 11.75m. elevation of the floor of Tomb 2, 11.24m. for Tomb 202, and 11.67m. for Tomb 5; all of which occur within the limits of the same temples. Tomb 108 thus occurs from 0.77 to 1.28 metres deeper than the others, and lies no less than 2.50 metres below the foundations of the Eastern Shrine in Stratum VIII-C. As No. 108 contained only an infant equipped with two beads, there would have been no reason for excavating such a deep shaft, and certainly no apparent reason for sinking the shaft of this tomb 1.28m. deeper than Tomb 2, which at least contained more beads. Tomb 108, like Tomb 7-9, is therefore only fortuitously associated with a Stratum VIII Temple. Instead, a Stratum X source is suggested by its location, since it would in that stratum be situated within the angle formed by the junction of the outside walls of

⁵ TG., 141-42, and Plate XII, inset.

Rooms 1080 and 1085, southwest of the area designated as 1086 on the Stratum X plan, and just off the street leading to the Stratum X Temple. In this corner of the X settlement the tomb shaft was excavated and orientated with two sides of the tomb parallel to the walls of the two buildings, and only a few centimetres away from them.

The floor elevation of Tomb 109 (ca. 9.42m.), in Square 5-K, is among the lowest of the tombs appearing on Plate XXII. In addition, most of the area of this tomb lies outside the limits of the Eastern Temple, with only part of the southeastern wall of the tomb being crossed by a wall projecting from the Temple. These circumstances suggest that Tomb 109 is not to be connected with Stratum VIII, and is not a tomb of the sacrificial type; this tomb will be discussed later with other members of the important Group VII.

Of the ten tombs which may be interpreted as containing sacrificial victims, we have now eliminated three (Nos. 7-9, 108, and 109) as having no connection with the overlying religious structures of Strata VIII and IX. The remaining seven tombs, however (Nos. 14, B, C, 54, 2, 202, and 5), may be regarded as definitely related to temple buildings, and hence in all likelihood contain sacrificial victims. These are to be grouped as follows. Belonging to the Western Temple of Stratum VIII-C are Tombs 14 and B; to the Eastern Shrine, also of Stratum VIII-C, are Tombs 2, 202, and 5. Each of these temples thus had a tomb containing an infant placed underneath the foundations of the front of the building, and at least one more within the building itself. Tombs C and 54, on the other hand, belong to the Stratum IX Temple. Here again, one interment was made beneath the walls of the structure (although in this case under the rear wall of the later extension, Room 904), while another was within the confines of the temple proper, and below its pavement, where it occupied a position similar to that of Tomb 14, in the Western Temple of Stratum VIII-C. The position of Tomb 5 is unique, since it was apparently associated with the podium of the Eastern Temple. The Central Temple of Stratum VIII, the Northern Shrine of the same stratum, and the Stratum X Temple have no tombs lying beneath their floors

or walls (cf., however, footnote 12). Just why these temples should have been ignored is not clear, but in the case of the Stratum VIII Northern Shrine, at least, it is obvious that this structure possessed no attraction whatever for tombs. Those few tombs lying near it (Nos. E, 107 and 102) originated in earlier strata, so that their apparent association with that structure is completely fortuitous.

None of the five tombs attributed to Stratum VIII Temples is crossed by walls of any stratum below VIII-C, and neither Tomb C nor Tomb 54, which have been attributed to the Stratum IX Temple, is crossed by the walls of any stratum underlying IX (cf. Table A). Consequently, no objections on these grounds may be made to their attribution to Strata VIII and IX. Additional tombs of a sacrificial type, this time related to the Stratum XI Temple, will be discussed in the section of this chapter dealing with the earlier tombs of Gawra. Why this practice is not represented in Stratum X by tombs beneath the temple of that level is a question for which we have no answer at present.

Several additional tombs present clues which relate them to definite strata. The first of these is No. 31, one of the richest tombs discovered. This burial lies in Square 9-M in a location that would place it only forty centimetres east of the Western Temple of Stratum VIII-C, or almost five metres from the *livân* of the Stratum IX Temple. In view of its location, therefore, this tomb may be related to either of these buildings, and consequently to either stratum. Nor do superimposed plans of the strata provide any additional information; from Table A we learn that this tomb was discovered in Stratum X; that the elevation of its floor was 10.78m.; and that it is crossed by walls of Stratum VIII-B, which again leaves a choice of either VIII-C or IX for its stratigraphic source. One positive indication is available to us, however. The walls of this tomb rose to a height of 77cm., making the maximum elevation of the tomb 11.55m. If the tomb had been sunk from Stratum IX, therefore, the roof would have reached, or protruded above the floor of that stratum—a manifest impossibility. Accordingly, we should assign this tomb to Stratum VIII-C, where it would have had a protective cover of earth about 65 to 85cm. or more in thickness.

It was, therefore, associated with the Western Temple of VIII-C, and occupied a position apposite to the double tomb, Nos. 24 and 25, at the front of the Temple and at its eastern corner.

Next is Tomb 60 of Group I in Squares 10-11 M. Table A shows that this tomb was intrusive in Stratum X, and that it is crossed by walls of Stratum VIII-A, possibly having its source in any one of the three intermediate levels of VIII-B, VIII-C, or IX. That this tomb does not belong to Stratum IX is indicated by the elevation of 11.45m. for the tops of its walls. The roof of this tomb thus lay at the level of the Stratum IX pavement, if not actually above it, and the burial must therefore have originated either in Stratum VIII-C or VIII-B. Other tombs in this group provide similar proof of their source in Stratum VIII. Tomb 61, and possibly No. 64 as well, would also have protruded above the floor of Stratum IX. In addition, Tomb 64 would have been situated within thirty centimetres of the edge of the mound, and finally, none of this group would be located near a religious or any other kind of building in Stratum IX. The problem is further simplified by the fact that Tomb 60 touches the wall lying immediately southeast of the Western Temple of Stratum VIII-C, and together with Nos. 16, 61, 37, 64, and 65—the remaining members of this group—seems to have been separated from the temple by this wall. The probability is, therefore, that this wall was standing when the shafts of these tombs were excavated, for otherwise (in Stratum VIII-B, for example, when the wall in question was covered by debris), the tombs could have been placed closer to the temple, as were Tombs 30, 59, and 24-25, on the other side of the same edifice. To be sure, the position of Tomb 60, which lies so close to the wall outside the temple, permits the interpretation that it cut through this wall, and the tomb should, therefore, be related to Stratum VIII-B. But it remains to be explained why Tombs 60, 61, and 16 form a line parallel to the wall; what, in Stratum VIII-B, was there to determine the alignment of their locations? The evidence is not entirely unequivocal, but its most logical interpretation is that Tomb 60 and, for that matter, all other tombs belonging to this group, are to be related to Stratum VIII-C,

where they were separated from the temple by a wall that was extant only in that stratum. Confirmation of the attribution of these tombs to VIII-C rather than to VIII-B would seem to lie in the fact that the Western Temple was actually in use only in Stratum VIII-C. In VIII-B the entrance to this edifice was blocked off and a definite effort was made to deface the building.⁶ Surely tombs of Stratum VIII-B would not have been located near a desecrated shrine; they would have been placed near religious buildings still held in veneration, and the Western Temple was used as a religious edifice only in Stratum VIII-C.

This argument does not preclude the possibility that tombs of other groups may have originated in Stratum VIII-B, but it does maintain that if tombs are attributed to that stratum they must be situated near the three temples which were then in use, namely, the Central and Northern Shrines, and the Eastern Temple. Tomb 45 of Group IV, in Squares 6 and 7-O, for example, is probably of Stratum VIII-B origin. Table A shows that it may have had a source in Strata VIII-B, VIII-C, IX, or X, but a more positive indication is available. The walls of Room 883 in Stratum VIII-C are missing directly over the location of this tomb; as a matter of fact, the width of the break in the walls of this room is exactly matched by the width of the tomb, and there is no way to account for this gap except by holding the shaft of Tomb 45 responsible. If we have correctly attributed its source, the tomb in question would then have been located nearly in the center of the open area separating the Northern Shrine from Rooms 837, 831, and 833.

The broken walls of Stratum VIII-C exactly above this tomb prove that its shaft must have been sunk from Stratum VIII-B. Even if this fact is ignored, however, the elevation of the top of the tomb walls (11.51m.), would have allowed a cover of earth only 20 or 30 cm. thick between the roof of the tomb and the floor of Stratum IX. This manifestly would not have been sufficient protection; either the walls of the tomb would not have been constructed so high within the shaft, or the shaft would have been excavated still deeper. The

⁶ TG, 30-31.

criticism may be made that Tomb 34, which lies about two metres from the tomb under discussion, has an identical floor elevation of 10.25m., yet it has been shown that No. 34 had its origin in Stratum IX, while it is now argued that No. 45 had a Stratum VIII-B source. The proximity of these two tombs, no less than their identical floor elevations, are factors that might beguile us into ascribing both to the same stratum. But the shaft of No. 45 definitely cut through Stratum VIII-C walls; on the other hand, the location of No. 34 is crossed by VIII-C walls, so that the attribution of both tombs to a single stratum is an impossibility.

Similarly, Tomb 29 of Group IV may also have had its source in Stratum VIII-B, although the floor elevation of this tomb is 11.74m., compared with the 10.25m. elevation of the floor of Tomb 45. The explanation of this difference again lies in the height of the walls of the tombs, which in the case of No. 29 rose to a mere 20cm., so that a deeper shaft was unnecessary. This tomb, also a member of Group IV, lying in Square 6-Q, is shown in Table A to have two possible stratigraphic sources: VIII-B and VIII-C. In Stratum VIII-C it would be situated in the small open space northeast of Room 888; in Stratum VIII-B it would occur, like Tomb 45, in the broad, open area southwest of the Northern Shrine. The latter location seems the more probable, although the possibility that this tomb could have originated in Stratum VIII-C must be admitted.⁷

Tomb 213, a stone cist in Square 7-M, and a member of Group V, is to be attributed to Stratum

IX, as were Nos. 62 and D of the same group. It was intrusive into Stratum X-A, and is crossed by walls of VIII-C (Room 887), so that Strata IX or X are possible sources. This tomb, however, seems to have cut the wall projecting southeast of Room 1007 in Stratum X, and hence must have originated in Stratum IX.

Tomb 124 brings us to a consideration of the important tombs of Group VI, hitherto ignored in our discussion. The three tombs forming this group (Nos. 124, 107, and 102) are located for the most part in Squares 5-M and 6-M, and have floor elevations that are remarkably uniform, all occurring within a range of 32cm. All three tombs were discovered just below the floor of Stratum XI, their walls extending well into that stratum. Tombs 124 and 107 are not crossed by the walls of any overlying stratum (see, however, footnote 8 below); and Tomb 102 is crossed only by Stratum VI walls. Obviously, therefore, we have now to deal with the most difficult part of our stratigraphic problem, for Table A gives little clue to the stratigraphic source of these tombs. By superimposing the location of Tomb 124 on the plans of overlying strata, however, it was discovered that walls of Strata X and X-A were broken and missing at the location of this tomb. The conclusion is then inescapable that the shaft of No. 124 cut through these strata, and the shaft must have been begun in a higher stratum. Consequently, the source of this tomb is now limited to any one of the three phases of Stratum VIII, or to Stratum IX; an origin in any stratum later than VIII-A would imply an impossibly deep shaft.

The association of this tomb with religious buildings of Strata VIII and IX unfortunately gives us no clue as to its source; its position could be interpreted as related to the Northern Shrine of VIII or to the IX Temple, but its depth suggests that it was a product of Stratum IX. The elevation of the floor of this tomb is 9.62m., while the walls rose to an elevation of 10.12m. If the tomb shaft had been begun in Stratum VIII-C, to take the lowest phase of that stratum, it would have been excavated to a total depth of well over two and one-half metres, and there would have been an earth-fill upon the roof of the tomb exceeding two metres in depth. Even though the roof of No. 124 possessed a cover

⁷ Also belonging to this group of tombs are Nos. G36-40 and G36-44, both located in Square 7-Q (in the d and a quarters of that square), and both intruding into debris below the Stratum XI floor level. These tombs, like Nos. G36-14, G36-26, G36-27, G36-30, G36-34, and G36-36 which are discussed in Footnotes 11 and 12 of this chapter, are not shown on Plate XXII, as their exact locations cannot now be determined. As a consequence, no positive stratigraphic source may be assigned to them, but in the case of the present two tombs, which occur somewhat deeper than the other members of Group VI discussed above, a source in Stratum IX seems the most probable. In that stratum they would have been situated near the northern corner of the Temple, whereas in both Strata X and VIII-C a complex of small rooms in this location would have effectively prevented the excavation of tomb shafts. Each tomb contained the remains of a child.

of stone slabs, it may be questioned whether its builders would have tested their strength to that degree. If sunk from Stratum IX, however, the roof of this tomb would have been between 1.60 and 1.70m. below the pavement of that level; this figure is still considerable, but more reasonable. Such evidence as there is, therefore, indicates a source for Tomb 124 in Stratum IX, where it was situated to the rear of the temple.

The remaining members of Group VI, viz., Tombs 107 and 102, present us with our most interesting problem. To begin with, these two tombs were unquestionably contemporaneous, for, although separated from each other by approximately a metre and a half, they were oriented on exactly the same north-northwest to southeast axis that is not duplicated by any other tomb discovered at Gawra. The reason for this peculiar orientation will later become clear, but at present the fact that it is characteristic of both tombs is suggestive of their contemporaneity. Conversely, this orientation demonstrates that Tomb 124, just discussed, was not constructed at the same time, for that tomb possesses a more orthodox alignment, its longitudinal axis pointing northwest-southeast.

It has been pointed out in the discussion of Tomb 124 that, so far as overlying walls are concerned, we have little indication of the stratigraphic sources of the Group VI tombs, since neither 124 nor 107 are crossed by any walls of higher strata, and since No. 102 is crossed only by walls of Stratum VI. In the case of Tomb 124, we have discovered that it cut through Stratum X walls, and consequently must have originated in a later stratum, but with Tombs 107 and 102 we have no such clue, and their source in Stratum X is a possibility that must be examined. If Tomb 107 originated in Stratum X it would be exactly enclosed by the walls of the building bearing the number 1003 on the Stratum X plan, neatly fitting into that structure, whose walls would then be exactly parallel with the tomb walls. Such a coincidence is too great to have been the result of an accident, and at once suggests a relationship between Tomb 107 and the building mentioned. To be sure, the northwest wall of the tomb would lie only thirty centimetres from the

northwest wall of Room 1003, compared with the 1.35m. distance separating their respective southeastern walls, but an absolutely precise centering of the tomb within Room 1003 is not vital to our thesis. If Tomb 107 is to be related, therefore, to Stratum X, it must be associated with Room 1003 of that stratum, and that structure would then be one of a very few, other than temples, to have enclosed a tomb within its limits.

In describing the architecture of Stratum X in Chapter I, the public, and possibly religious, character of this building was pointed out, the architectural evidence consisting of the regular plan of this edifice, the possibility that it possessed buttresses, and the fact of its niched walls (p. 11). There was, in addition, one feature of this structure that was most unusual; namely, the paving of the whole interior with mud-bricks laid in regular courses to a depth of nearly one metre. As all other buildings in this stratum had only the usual earth floors, the paved floor of Room 1003 would, by itself, merely emphasize its public character. However, with the knowledge that Tomb 107 is located beneath that building, the fundamental reason for the extraordinarily thick floor is now apparent; it was intended to emphasize the sacred character of the soil beneath, and to prevent its desecration. Room 1003 must consequently be interpreted as a shrine, built to fix and protect the location of the tomb lying underneath its floor; as such, it is unique among the buildings of Gawra.

If we accept this explanation of the nature of Room 1003, do the contents of Tomb 107 which lies beneath it tend to confirm such an interpretation? It must be conceded that richer furnishings might have been expected in the burial of some personage important enough to have had a shrine erected over the location of his tomb, for Tomb 107 contained no objects of great intrinsic value, the adult burial which it enclosed being supplied merely with six stone spheres. On the other hand, the tomb of a priest need not be expected to yield a rich collection of objects, and the stone spheres may even have had some cult use not now suspected. At any rate, it is important that Tomb 102 lying outside the shrine, also contained stone spheres, for this

coincidence furnishes another link in the relationship between Tombs 107 and 102.

The reason for the unusual orientation of Tomb 107 is now clear, for it was placed with a similarly oriented building. However, this orientation is also unusual for temple buildings in all strata from XIII through VIII, which always have their corners set to the cardinal points, so that the real reason for such a peculiar alignment still eludes us. But we can now explain the identical orientation of Tomb 102, for that tomb is located outside the shrine, lying only 35cm. away from its northern corner, with the northwest wall of the tomb exactly parallel to the southeast wall of the building.

The final piece of evidence suggesting a Stratum X origin for Tomb 107 is based on the size of the mud-bricks used in the construction of that tomb. These measured 50 x 25 and 51 x 26cm., and are thus larger than the bricks generally used in either Stratum IX or VIII. They are, however, identical in size with some of the bricks used in Stratum X buildings, and compare with the 50 x 23 and 50 x 22cm. measurements of the bricks used in the construction of the shrine itself. The close identity in size between the bricks used in the construction of the shrine and those in Tomb 107 further serves to establish their relationship.

It was remarked in discussing Tomb 124 that all three tombs comprising Group VI had floor elevations occurring within a very narrow range of only 32cm. The elevations of the roofs of these tombs are even more uniform, since for No. 124 we have a figure of 10.12m.; for No. 107, 10.09m.; and for No. 102, 10.14m. The range in elevation of their roofs is therefore a mere five centimetres, which may be construed as evidence of their source in a common stratum. Such an argument is, however, completely fallacious, for the shaft of Tomb 124 cut into the southwest wall of the shrine, and must have originated in a stratum later than X. Tomb 107, on the other hand, cannot have a source in a stratum later than X, because its location was covered from the Stratum X floor level to a depth of one metre below floor level with an undisturbed pavement of mud-brick, which can only have been laid after the tomb had been constructed. The floor of the shrine had an elevation of 11.46m. at its

northwestern corner, and 11.24m. at its southeastern corner. The roof of Tomb 107 consequently lay from 1.15 to 1.37m. below the upper surface of the floor, with almost one metre of this distance being filled with the lower courses of the mud-brick flooring. The floor, consequently, must have extended to within 20 to 50cm. of the tomb roof, forming a remarkable, as well as unique, cover to the tomb.

It has already been proved that Stratum IX cannot have been the source of Tomb 107 because of the mud-brick flooring lying intact above the location of that tomb. To consider other alternatives, however, Stratum VIII-C or any other phase of the VIIIth stratum cannot have been the source of No. 107 for the same reason. In the case of No. 102, a Stratum VIII source is improbable, for it would imply an extremely deep shaft of about 2.30m. or more. Then again, as these tombs were discovered in Stratum XI, they may even be considered of Stratum X-A origin. If Nos. 107 and 102 are to be attributed to Stratum X-A their roofs would have been about 60 to 70cm. below the floor of that stratum. Such a comparatively shallow shaft would not have been an impossibility, although in view of the wealth contained by Tomb 102, a thicker earth cover might be expected. Another objection to ascribing a Stratum X-A source to these tombs arises from the fact that two walls east of the area numbered 16 on the plan of Stratum X-A have apparently been cut into by the shaft of Tomb 102, if we may presume that the shaft of this tomb had extended slightly southeast of the actual tomb limits. Consequently, Tomb 102, since it appears to have cut into X-A walls, and also its contemporary, Tomb 107,⁸ must have originated in some higher

⁸ Tomb 107 is apparently crossed by two walls of Area 16 in Stratum X-A, but these walls encroach on the limits of the tomb by a matter of a very few centimetres. On the other hand, part of the southern wall enclosing this area is missing, and has possibly been cut into by the southeastern corner of the tomb. Or this circumstance may be explained if we presume the excavators of the shaft of Tomb 107 widened the bottom of the shaft slightly at its floor, so that undercutting produced the effect of X-A walls crossing over the tomb. While these walls do not decisively cross over the location of the tomb, in my opinion they definitely prohibit the attribution of this tomb to Stratum X-A.

stratum. That stratum, to repeat, can only be Stratum X, and the attribution of these two tombs to Stratum X is confirmed by a cumulative weight of evidence permitting no other interpretation.

The four tombs forming Group VII (Nos. 111, 109, 114, and 110), lying in Squares 4 and 5, M and K, include three very richly furnished tombs, and one containing a triple burial (Plate XLVI.a). All had been constructed at the bottom of shafts terminating just below the Stratum XI floor, and all are first crossed by walls of Stratum VIII-C, with the exception of Tomb 110, which is crossed only by VIII-A walls. We are thus confronted with three possible stratigraphic sources for these tombs, and it would be difficult to assign a specific stratum of origin to any of them were it not for the fortunate circumstance that Tomb 110 is the only one discovered at Gawra where it was possible to trace the shaft of the tomb back to its starting point.⁹ The floor of Tomb 110 lay below Stratum XI, at an elevation of 9.43m.; above this, the shaft was traced back to an elevation of 11.33m., or to a point just below the Stratum X floor, in which stratum this tomb must have originated. At the maximum elevation of 11.33m., the shaft extended to a height of 1.90m. above the tomb floor; possibly another ten centimetres of hard-packed earth lay at the top of the shaft, and had once again become the floor of the stratum, so that the original shaft probably attained a total depth of two metres. A source in Stratum X for this tomb, as well as the others in this group, is logical, for they would have been located at the end of the street leading to the Stratum X Temple, and as close to that building as it was possible to be in the northeastern section of the mound. On the other hand, the present Group VII tombs may have been associated with the shrine erected over the location of Tomb 107. That building lies nearly ten metres northwest of the area occupied by the tombs under discussion; however, it is difficult to explain why Tombs 111, 109, 114, and 110, if they were intended to associate with the shrine of No. 107, were not then located north or

northwest of that building where there were open areas, and where they could have been situated much closer to its holy ground. It is thus questionable whether we may consider the present four tombs as associated with the shrine of Tomb 107; however, one relationship between them is clear. This is the discovery in Tomb 110 of stone spheres similar to those produced by Tombs 107 and 102. As a matter of fact, both 107 and 110 contained an identical number of these spheres—six each—and to make the parallel even more striking, Tomb 114 also contained six stones; this time, however, natural pebbles of red jasper.

The objection may be raised that although Tomb 110 is to be connected with Stratum X, a similar attribution for Nos. 111, 109, and 114 does not follow merely because these three are grouped with No. 110. However, the elevations of the floors of Tombs 109 and 114 (9.42m.) is only a single centimetre below that of Tomb 110, so that their source in a common stratum may at least be suspected. Tomb 111, to be sure, has a floor considerably higher than the others (10.02m.), but it joins with No. 109 to form a double tomb. This double tomb does not have a common wall, as did Nos. 25 and 24, but the southeast wall of No. 111 is built against the northwest wall of No. 109, so that it is impossible to dissociate them. Furthermore, Tomb 114 closely adjoins and almost touches No. 109 and, to a slightly lesser degree, No. 111. Finally, the orientation of all four tombs in this group is identical. All members of this group are thus interrelated, and the group may be considered a unit, so far as its stratigraphic source is concerned at least.¹⁰ This source was proved to be Stratum X in the case of Tomb 110, and an identical attribution for Tombs 111, 109, and 114 must therefore be conceded.

Up to this point we have considered thirty-five of the total of forty-five tombs appearing on Plate

⁹ This tomb lay next to an unexcavated fringe of the mound, through which the shaft of the tomb could be followed back to its starting point in Stratum X. Cf. Plate XLVI.a, upper right, where the base of this scarp may be seen.

¹⁰ The elevations of the tops of the walls of these four tombs have regrettably been omitted from the field records, but an examination of Plate XLVI.a discloses that the walls of all of these tombs except No. 110 rose to approximately the same height. The concentration of these tombs near the location of the Stratum XI Temple must be construed as fortuitous because, to judge from Plate XLVI.a, the walls of these tombs possessed a minimum elevation of from 60 to 90cm. Consequently, the roofs of these tombs would have been well above the floor level of Stratum XI and must be attributed to a later stratum.

XXII. All of these have been found to originate in five consecutive strata, viz., VIII-B, VIII-C, IX, X, and X-A. Most of the remaining ten tombs have no indications as to their specific stratigraphic sources, but it may be possible to assign a stratum of origin to them on the basis of their association with adjoining tombs, or by other means.

Five tombs of Group III, in Squares 8 and 9, Q and O, have been omitted from earlier discussion. These are Nos. 57, 30, 59, 46, and 18, of which Nos. 59 and 57 are stone cists rather than mud-brick tombs. Group III is composed altogether of seven tombs; two of these have been considered (Nos. 25-24) and attributed to Stratum VIII-C. Consequently, an identical stratigraphic source might be expected for the five tombs now under consideration, as all members of this group closely adjoin, and all are more or less closely situated to the Western and Central Shrines of Stratum VIII-C, although Tomb 46 alone may also be associated with the Stratum IX Temple. In the case of Tombs 30, 59, 46, and 18, Table A lists Stratum VIII-B as a possible source, but it was remarked earlier in this chapter, when discussing the tombs of Group I, that it is extremely unlikely that any burials should have been associated with the Western Temple in the A and B phases of Stratum VIII, as in those periods the temple was defiled, and its entrance blocked. It may be asserted with some confidence, therefore, that these four tombs originated no later than Stratum VIII-C; however, Tombs 57, 59, 46, and 18 have as an alternative a possible source in Stratum IX. By tracing the location of Tombs 59 and 46 on the plan of Stratum IX we find, however, that the shafts of these tombs had cut into walls of Stratum IX; consequently they must have originated in a higher stratum, which can only be Stratum VIII-C.

We have, however, ignored the fact that Tombs 57, 59, and 46 were intrusive in Stratum X; Tombs 30, 18, and 25-24, on the other hand, were dug into Stratum IX so that these two groups were separated by approximately 1.25m. of debris. This circumstance might indicate a source in Stratum IX for Nos. 57, 59, and 46, and a Stratum VIII-C source for the tombs having higher elevations, if it were not for the fact that Tombs 59 and 46 cut through Stratum IX walls and cannot have origi-

inated in the same stratum. How the difference in elevation is to be explained is problematical; perhaps because Nos. 57 and 59 were stone cists covered with stone slabs, their roofs were deemed capable of supporting a heavier burden of earth, and their shafts were consequently dug deeper. No. 18, however, was a mud-brick tomb having no trace of a roof or the material with which it might have been made, but since this tomb had been disturbed and apparently thoroughly plundered, it is possible that it, too, originally possessed a stone slab cover or wooden roofing, either removed by the tomb robbers or destroyed by them.

To sum up, Stratum VIII-C is the only stratum—if we may treat these tombs as a group instead of disconnected units—in which Nos. 57, 30, 59, 46, and 18 could have originated, since in Stratum VIII-B they would associate with a building which had lost its religious function, and because two of those tombs cut through Stratum IX walls, and must as a consequence have originated in a later stratum. An attribution of Nos. 57, 30, 59, 46, and 18 to Stratum VIII-C would also agree with the source ascribed to Tombs 34-25, and thus date the entire group to the earliest phase of the VIIIth stratum.¹¹

The isolated tomb in Square 10-Q, designated by the letter "A", is similarly to be attributed to Stratum VIII-C. This tomb has two possible sources, Strata VIII-C and IX, but as it is apparently associated with the Western Temple it undoubtedly originated, like the tombs of Group III, in Stratum VIII-C.

Tomb 20 is our next example. This is another

¹¹ In addition to the seven tombs forming Group III of Plate XXII, four additional tombs were discovered in Squares 8-Q and 8-O which are not shown on that plan. They are Nos. G36-14 (8-Q), G36-26 (8-O), G36-27 (8-Q), and G36-30 (8-O), of which Tombs G36-14 and G36-26 were intrusive into Stratum X-A, while the other two were discovered just below the floor level of Stratum XI. All four tombs, therefore, form a part of Group III, but it will be noted that they occur much deeper than the other members of the group, and presumably had their origin in some stratum or strata earlier than that attributed to the members of this group discussed above. Possibly Tombs G36-14 and G36-26 originated in Stratum IX or X; on the other hand, Tombs G36-27 and G36-30, since they had been sunk deeper than the others, probably belong to Stratum X or X-A. No. G36-26 was a cist, but all four tombs contained the bones of children.

isolated tomb in Square 8-M, situated exactly at the entrance to the Stratum IX Temple, although it can have no relation to that structure, since the floor of the tomb rested on the floor of the stratum. It had, therefore, been sunk into Stratum IX from an overlying level, and since Table A shows it is crossed by walls of VIII-A, the only possible sources of this tomb are Strata VIII-B or VIII-C. The floor of this tomb was determined to be 12.13m. above the zero point, the highest elevation of any of the Gawra tombs. The height of the tomb walls is not specified, but if they were only ten or twenty centimetres high the roof of the tomb would then have occurred at about the level of the Stratum VIII-C floor; therefore the origin of this tomb in Stratum VIII-B must be presumed. Indeed, it is probable that the location of this tomb is to be explained only by attributing it to Stratum VIII-B, for had it been of VIII-C origin it would almost certainly have been situated closer to the Western Temple.

Three tombs, Nos. 171, 209, and 169, comprising Group IX and situated in Squares 6-J and 6-G, round out the discussion of the stratigraphic sources of the tombs shown on Plate XXII. Tomb 171 was discovered in Stratum XI, at an unknown elevation; it is not crossed by the walls of any overlying stratum. Tomb 169 also was intrusive in Stratum XI; its floor has an elevation of 9.49m., and like No. 171 it is not crossed by walls of any higher stratum. Tomb 209, discovered in Stratum X-A, has the highest elevation (11.14m.) of any in this group. It is first crossed by walls of Stratum VI. With such limited evidence from the strata overlying these three tombs positive stratigraphic attributions are hardly possible. However, it will be noted that two of these tombs were intrusive in Stratum XI; the other was sunk into Stratum X-A. The difference in elevation of their floors is thus over one and a half metres, and as a consequence, two different strata of origin seem to be indicated. The position of Tomb 169 shows that it cuts through Stratum X-A and X walls; in all probability, therefore, this tomb originated in Stratum IX, where it may have been associated with the large building southeast of the Temple. Tomb 171, since it was likewise intrusive into XI, is also to be attributed to

Stratum IX, although a Stratum X source is not improbable. Tomb 209, which has the highest floor elevation of any tomb in this group, in all likelihood was the product of the inhabitants of Stratum VIII-C, and was associated with the Eastern Temple.¹² Although these attributions appear reasonable, it must be emphasized that no positive stratigraphic sources may be assigned to these three tombs with the evidence now at hand.

In order to summarize the results of the preceding detailed discussion, the attributions decided upon for all of the tombs appearing on Plate XXII are listed in Table B.

Early Tombs (Plate XXIII). Still to be discussed is the smaller number of tombs intrusive into Strata XI-A, XII, and XIII, which are of importance because they are the earliest examples of this type of burial discovered at Gawra. These tombs, totaling twenty-seven, appear on Plate XXIII, where it will be seen that most of them are associated with the Temple of Stratum XI. As the precise locations of these tombs are not available,¹³ the method used in determining the stratigraphic sources of the later tombs cannot now be employed.

¹² Two additional tombs, Nos. G36-34 and G36-36, in Squares 7-K and 7-J respectively, are to be considered with the three tombs of Group IX just discussed. Tomb G36-34 was intrusive into Stratum XI, as were Tombs 171 and 169 described above. Perhaps, like those tombs, it is also to be attributed to Stratum IX, but it is located in or near the Stratum X Temple, and may consequently be contemporaneous with that edifice. In the lack of any other evidence substantiating this hypothesis, however, it has seemed wiser to regard this tomb as a Stratum IX product. Tomb G36-36, on the other hand, was discovered in Stratum X and is, therefore, more probably of Stratum VIII-C origin, like No. 209 of the present group.

¹³ All tombs shown on Plate XXIII, with the exception of No. 180, were discovered in the sixth season of excavations. Their positions are only approximately noted on this plan, and in the field notes, because in this season nearly two hundred burials of various types were uncovered, making it impossible to locate the exact spot at which each one occurred. The method of locating tombs, as well as other types of burials in this season consisted of dividing each main square into quarters, which were designated by the letters a, b, c, and d, reading in a clockwise direction. By this method it is possible to determine within a few metres the location of a tomb or grave, and the tomb numbers appearing on Plate XXIII have, therefore, been placed in the centers of the sub-squares to which they belong. The only exceptions are Tombs 180, G36-42, G36-48, and G36-146, which have no sub-square designations.

TABLE B
PROBABLE SOURCES OF THE TOMBS APPEARING ON PLATE XXII

	<i>Tomb No.</i>	<i>In Stratum</i>	<i>Elevation of Tomb Floor</i>	<i>Elevation of Tomb Wall</i>	<i>Probable Stratum of Origin</i>
Group I	61	X	11.13	11.45	VIII-C
	60	X	11.39	11.53	VIII-C
	16	X	10.72	—	VIII-C
	37	X	10.83	10.96	VIII-C
	64	X	10.74	11.23	VIII-C
	65	X	10.68	10.83	VIII-C
Group II	14	X	11.27	11.44	VIII-C
	7-9	X-A-	10.70	10.99	X
	31	X	10.78	11.11	VIII-C
	B	X	—	—	VIII-C
	A	X	—	—	VIII-C
	57 (cist)	X	10.61	11.04	VIII-C
Group III	30	IX	11.96	12.30	VIII-C
	59 (cist)	X	—	—	VIII-C
	25	IX	—	—	VIII-C
	24	IX	—	—	VIII-C
	46	X	—	—	VIII-C
	18	IX	11.87	12.27	VIII-C
	a { G36-14 G36-26 (cist) G36-27 G36-30	X-A	9.83	—	(IX or) X
		X-A	—	—	(IX or) X
		XI-	—	—	(X or) X-A
		XI-	—	—	(X or) X-A
	20	IX	12.13	—	VIII-B
	C	X	—	—	IX
Group IV	29	IX	11.74	11.94	VIII-B
	34	XI	10.25	11.35	IX
	45	XI	10.25	11.51	VIII-B
	53	X	11.51	11.73	IX
	54	X	11.80	11.95	IX
	b { G36-40 G36-44	XI-	—	—	IX?
		XI-	—	—	IX?
	E	X	11.33	11.87	IX
	62	X	11.60	12.08	IX
	226	XI	—	—	X-A
Group V	249	XI	9.59	10.03	X-A
	D	X	11.93	12.23	IX
	213 (cist)	X-A	10.86	11.19	IX
	124	XI-	9.62	10.12	IX
	107	XI-	9.33	10.09	X
Group VI	102	XI-	9.30	10.14	X
	111	XI	10.02	—	X
	109	XI-	ca. 9.42?	—	X
Group VII	114	XI-	9.42	—	X
	110	XI-	9.43	—	X
	2 (cist)	X	11.75	—	VIII-C
	108	XI	10.47	10.70	X
Group VIII	202 (cist)	X-A	10.82	11.24	VIII-C
	5	X	11.67	12.06	VIII-C
	171	XI	—	—	IX?
Group IX	209	X-A	11.14	—	VIII-C?
	169	XI	9.49	—	IX?
	c { G36-34 G36-36	XI	—	—	IX? (or X?)
		X	—	—	VIII-C?

(a) Cf. footnote 11

(b) Cf. footnote 7

(c) Cf. footnote 12

Two factors, however—the concentration of these tombs near a temple building, and their depth—point strongly to the source of the majority of them in Stratum XI.

The tombs appearing on Plate XXIII cannot be attributed to Stratum X-A or to strata above X-A, because most of them were intrusive into Stratum XII,¹⁴ and extremely deep tomb shafts of almost three metres or more would thus have been required. A shaft of such depth would exceed that of any tombs discussed so far; furthermore, as nearly half of the tombs plotted on Plate XXIII contained the remains of infants or children, and since none of them contained any fine objects of stone or gold, or even a large collection of tomb furnishings, no reason existed for excavating deep tomb shafts, such as would have been required from Stratum X-A. It must also be remembered that Stratum X-A was not graced by a temple or any other important public building, so that the concentration of no less than nine tombs in Square 5-J would be without explanation if a Stratum X-A source is insisted upon.

Similarly, a source in Stratum XI-A cannot be convincingly argued because no temple or other public building of Stratum XI-A was discovered in the area where most of these tombs were discovered. Furthermore, three tombs (Nos. G36-32, G36-46, and 180) were intrusive in Stratum XI-A and cannot have been sunk from the same stratum.

On the other hand, two objections may be made to attributing these tombs to Stratum XI. The first is that the area to the rear of the XI Temple (Squares 5-K and 5-J), where no less than eleven of the tombs in question are located, was occupied by a compact series of rooms and ovens. It would seem unlikely that the builders of these tombs would have selected such a spot to sink their tomb shafts, particularly since we have learned that the shafts of the later tombs were usually excavated in open areas of their respective settlements. Secondly, in Square 5-J of Stratum XI the elevations of the floors range around 10.50 to 10.60m.; as the Stratum XII floors in the same square were fixed at 7.94 to 8.14m., the tomb shafts must as a consequence have

extended about 2.50m. into the débris below, a depth that would suggest a source in a stratum earlier than XI. Both objections may be answered if the plan of Stratum XI (Plate V) is examined more closely. It will then be seen that the elevations of the floors of the rooms of Square 5-J are from 50cm. to more than one metre higher than the floor elevations of the rooms in 6-J, the adjoining square. In addition, the eastern wall of Room 19 abuts on the broken southern corner of the Temple, while the western corner of the Temple is largely destroyed by a later building built over it, which also belonged to Stratum XI but continued in use in Stratum X-A. The evidence then is conclusive in showing that there was building activity in Squares 5-K and 5-J only in a late phase of Stratum XI, after the Temple of that stratum had fallen into disuse, and probably after the eastern section of that edifice had slid down the slope of the mound. The area to the rear of the Temple, which had been kept open while the Temple was intact and in use, was then built up. Our tombs must, as a consequence, be dated to the earlier phase of Stratum XI; that is, when the area to the rear of the Temple was open and permitted the excavation of tomb shafts, and when the floor level in that area was nearly one metre lower than in the succeeding phase (cf. Chapter I, p. 17).

In regard to the tombs not located southeast of the Temple of Stratum XI, Tombs G36-144 and G36-137 occupy positions on the fringe of the Stratum XI settlement, close to the edge of the mound. Tombs G36-135, G36-146, 180, and G36-110 apparently occur on the slope of the mound, but since the western corner of the Temple extended beyond the present contour of the tepe, these tombs were probably excavated in the same extension of the edge of the mound that existed when the Stratum XI Temple was in use.¹⁵ Tomb G36-100 is the only one situated north of the Temple, and lies close to the northeastern corner of that edifice. Why this open area should not have been selected for more interments is not clear. Tomb G36-104, the

¹⁴ The tombs intrusive into Strata XI-A, XII-A, and XIII are so designated on Plate XXIII. Three tombs were discovered in Stratum XI-A; twenty in XII; one in XII-A; and three in XIII.

¹⁵ Tombs G36-146, G36-42, G36-48, and 180 have no sub-square designations. The field notes do, however, specify that Tomb G36-146 was located at the edge of the mound in Stratum XII, or near the point where it is located on Plate XXIII.

only tomb discovered intrusive into Stratum XII-A, lies just north of No. G36-100, at the very edge of the mound.

Tombs G36-32, G36-86, and G36-134 occur below the Temple, and are probably burials of the sacrificial type similar to Tombs 14, B, C, 54, 2, 202, and 5 of Plate XXII. It will be recalled that these later tombs were found to be related to three temples, viz., the Western and Eastern Temples of Stratum VIII-C, and the Stratum IX Temple. Each of these buildings had two or three tombs containing infants or children sunk beneath its walls or floors. Only No. G36-134 of the three earlier tombs now being discussed contained the remains of an individual older than a child; this tomb yielded the bones of a youth, and the field records show that this tomb must have been located under the western corner of the Stratum XI Temple. This location may be compared with that of Tomb 2, under the Eastern Temple of Stratum VIII-C, while Tombs G36-32 and G36-86 occupied positions under the XI Temple similar to Tombs 202 and 5 below the Eastern Temple of Stratum VIII-C.

The locations of Nos. G36-60, G36-68, G36-151, G36-150, and G36-155 are more difficult to explain, for they are situated far from the Stratum XI Temple and are, consequently, separated from the main body of tombs associated with that building. We may have a hint of the explanation in the fact that of these five tombs, Nos. G36-151, G36-150, and G36-155 were sunk as deep as Stratum XIII, and may therefore have had their origin in a level earlier than Stratum XI, presumably Stratum XI-A. If these three tombs are to be attributed to Stratum XI-A, No. G36-155 would lie within the confines of the ruined and defiled XI-A Temple (Rooms 75-77, Plate VI); Tomb G36-150 would lie in the open area designated as No. 88; and Tomb G36-151 would occupy a position in or near the irregularly shaped private house in Squares 5-M and 6-M with which seventeen graves were also associated (Chapter III, p. 102). A source in Stratum XI-A is, therefore, indicated for the three tombs intrusive into Stratum XIII, and limited confirmation of this attribution is provided by the location of Tomb G36-150 which may be seen on Plate XV. This tomb, whose floor was intrusive into Stratum XV débris, and whose walls

lay above the floor of Stratum XIII, is crossed by Stratum XI walls, so that it must have been contemporary with either Stratum XI-A or Stratum XII. Of these, Stratum XI-A is the more likely source, for the tomb would hardly lie deep enough to have been sunk from XII. Tombs G36-60 and G36-68 of the present group, however, although grouped with Tombs G36-150 and G36-151, probably had their source in Stratum XI, for they were not as deep, being intrusive into Stratum XII. In Stratum XI they would have occurred in the open area designated as No. 42 on the Stratum XI plan. The reason for their separation from the main body of the Stratum XI tombs to the southeast is not now clear, but they (and also Tomb G36-104) may represent the period following the collapse of the temple building, when the area to the south of the temple was being built up, and the excavators of these tomb shafts were, as a consequence, forced to shift their activities to another portion of the mound, away from the XI Temple.

The appended Table C lists the tombs located on Plate XXIII, and their probable strata of origin as determined in the preceding pages. Those tombs which are designated on this table as semicircular or elliptical possess ground plans of those shapes, a feature that will be discussed in Section B of this chapter.

Summary. The eighty tombs of mud-brick and stone have now been discussed, and an effort has been made to assign them to the strata in which they originated. The means employed to determine these strata of origin have included the establishment of a *terminus ad quem* by ascertaining in the case of each tomb whether it was crossed by the walls of any stratum lying over it. Most tombs, happily enough, were so crossed by later building walls, and the upper limit of their stratigraphic source was thus fixed. In other cases, factors such as the elevation of the floor and walls of a tomb in relation to the elevations of the floors of overlying strata; the association of tombs with temples; and the location of tombs in open areas of the various settlements proved decisive in attributing a tomb to a particular stratum. Ten tombs were found to be of a sacrificial character, as they had been sunk below temple walls or floors. No consideration has yet been given to the types and construction of the tombs themselves, the

TABLE C
PROBABLE STRATIGRAPHIC SOURCES OF THE TOMBS APPEARING ON PLATE XXIII

<i>Tomb No.</i>	<i>In Square</i>	<i>Intrusive into Stratum</i>	<i>Probable Stratum of Origin</i>
180	4-J	XI-A	XI
G36-32	4-J, b	XI-A	XI
G36-46	5-J, b	XI-A	XI
G36-48 (cist)	5-J	XII-	XI
G36-42	5-J	XII	XI
G36-43	5-J, c	XII-	XI
G36-60	5-M, a	XII-	XI
G36-68	5-M, d	XII	XI
G36-74	5-K, a	XII-	XI
G36-86 (semicircular)	4-J, b	XII	XI
G36-90	5-K, a	XII	XI
G36-95	5-J, b	XII-	XI
G36-100	4-K, c	XII	XI
G36-105	5-J, a	XII	XI
G36-110 (semicircular)	3-K, a	XII	XI
G36-111	5-J, c	XII-	XI
G36-120	5-J, a	XII-	XI
G36-122 (semicircular)	5-J, d	XII-	XI
G36-134	4-J, c	XII-	XI
G36-135	5-G, c	XII-	XI
G36-137	6-G, c	XII-	XI
G36-144	6-J, d	XII-	XI
G36-146	4-G	XII-	XI
G36-104 (elliptical)	3-M, a	XII-A	XI
G36-150	6-O, d	XIII-	XI-A (or XII?)
G36-151	5-M, d	XIII	XI-A?
G36-155	5-Q, a	XIII	XI-A?

physical remains which they contained, or the funerary furnishings with which the dead were equipped; but from our examination of the vertical and horizontal distribution of the tombs, particularly in relation to temples of various strata, certain facts have now been established to which attention should be directed.

First, far from being the products of a people having no connection with Gawra, the tombs were built and occupied by Gawrans of a definite period. This period is not represented by any single stratum or interstratigraphic interval; on the contrary, the custom of interring the dead in tombs is to be related to the inhabitants of Strata XI-A through VIII-B. No tombs have been discovered that can be assigned to strata antedating Stratum XI-A, or that are later than Stratum VIII-B. The tombs are thus a feature of the so-called Uruk period, in its Gawra

phase at least, which begins with Stratum XI-A, and comes to an end with the construction of Stratum VIII-A, marking the advent of the Jemdet Nasr period.

Second, the stratigraphic attributions of the tombs determined in the preceding pages may now be summarized as follows:

TABLE D

<i>Stratum of Origin</i>	<i>Number of Tombs</i>
VIII-B	3
VIII-C	22
IX	14
X	10
X-A	4
XI	24
XI-A	3

This tabulation is of some interest, for it reveals that the popularity of the Gawra tombs reached two peaks; one at the beginning of the so-called Uruk period, in Stratum XI, and the second towards the close of the same era, in Stratum VIII-C. The greatest number of tombs attributable to any single level is the twenty-four assigned to Stratum XI. This number may include a few tombs appearing on Plate XXIII which have incorrectly been attributed to Stratum XI; however, the present evidence does not permit a closer check. Even if the number of tombs assigned to Stratum XI should eventually prove incorrect, additional evidence will most probably revise only our figure, and not the fact that in Stratum XI tombs as a type of interment were more popular than at any other time until Stratum VIII-C was constructed.

Why tombs should have been more common in Stratum XI than in the succeeding strata is, however, puzzling. Perhaps this was due to a larger population in Stratum XI than was supported by the settlements of X-A, X, or IX, although this interpretation is at least debatable. Stratum X-A has only four tombs attributed to it; a circumstance which is easily explained when it is recalled that the excavated portion of this stratum had no temple or shrine to attract burials of any kind. But somewhat larger numbers of tombs might have been expected for Strata X and IX than the ten and fourteen, respectively, attributed to them, for both settlements had been built around centrally located and dominant religious structures. There is, however, one clue. If Plate XXII is examined, it will be seen that no tombs earlier than Stratum VIII-C were found in Squares 7 and 8, G and J, or in Squares 9-11, G-K. This is precisely the area to the southeast, south, and southwest of the Strata IX and X Temples which was not excavated in Strata X-A and XI. Since most Stratum IX tombs, and all Stratum X tombs yet discovered were found in Levels X-A and XI, there is a distinct possibility that additional tombs remain undiscovered in that sector. Indeed, this may more properly be called a probability when it is recalled that this southern section of the mound was almost completely free of walls and buildings in Strata IX and X and would, therefore, have represented a choice spot for the excavation of

tomb shafts. In any case, both Strata X and IX show a steady increase in the popularity of the tomb type of burial from the low point of Stratum X-A, while the richest tombs of any stratum are those accredited to X. Stratum IX was largely religious in character, so that the increased number of tombs attributed to it may be explained by this fact alone. On the other hand, if additional tombs do lie in the unexcavated portions of Strata X-A and XI in the southern quarter of Gawra, as indicated above, it will undoubtedly be found that more of these originated in Stratum X than in Stratum IX, so that the final figures for these strata may yet prove to be equal.

In Stratum VIII-C the mound of Gawra became an acropolis, and the number of tombs accordingly rises to its final peak of twenty-two. Three temples monopolized the shrinking area at the top of the mound in this level, but by far the greater number of tombs originating in Stratum VIII-C were concentrated near the Western Temple. This circumstance has some explanation now lost to us, which may lie in the nature of the deities worshiped in that edifice (cf. Chapter III, p. 123). In Stratum VIII-B, therefore, when this temple was unaccountably desecrated and blocked off, the number of tombs decreases sharply to a mere three. It may be, however, that the popularity of the tombs had also been declining in this phase of the VIIIth Stratum. At any rate, the succeeding stratum of VIII-A marks the end of the Gawra tombs and the inauguration of a new cultural era in North Mesopotamian prehistory.

Third, as only eighty tombs were discovered, which probably contained originally the remains of only eighty-seven persons (cf. p. 76), an exclusive character in this type of burial may be indicated. This number can represent only a very small percentage of the total population of Gawra in Strata VIII-B through XI-A. As simple graves on the mound attributable to the same strata are more than twice as numerous, and since both types of interment were used at the same time, it would appear that the tomb type of burial was restricted to certain elements in the Gawra population. Identification of these elements is at present difficult, if not impossible, but the most plausible explanation is that

the occupants of the tombs represent either a distinct racial strain in the Gawra population or were members of an upper class, such as priests, governing officials, or wealthy individuals (and, of course, their children). Of these, the latter seems the more likely. It has been shown that the occupant of Tomb 107 had been held in sufficient reverence to have had a shrine erected over his tomb. In this case at least, therefore, the occupant of the tomb was a priest or holy man; Tomb 102, on the other hand, probably contained the burial of a wealthy individual, located outside the shrine of Tomb 107 because of the sanctity of its ground. In the same manner it has been shown that the tombs, in an overwhelming number of instances, were situated as close to the temple buildings of their respective strata as was physically possible, while in other cases certain tombs were deliberately located under the foundations and floors of temple buildings, and thus must contain sacrificial victims. There is, consequently, an underlying religious significance to the Gawra tombs that is their fundamental characteristic, but at present we cannot go beyond that statement with any degree of assurance.

Whether more tombs are awaiting discovery in the as yet unlocated main cemetery of Gawra, somewhere on the plain below (cf. Chapter III, p. 121) is another problem requiring solution. There seems to be no reason to doubt that tombs will be found within that cemetery, at least some that were constructed in the time of Stratum X-A, when there was no temple on the mound to attract them. If they do exist, they would be invaluable indeed for rounding out the picture—incomplete now—of the talents and accomplishments of the tomb-builders of Gawra in Strata VIII-B through XI-A.

B. TYPES AND CONSTRUCTION (PLATES XXIV-XXVII; XLVI.b-XLIX)

Three types of tombs have been referred to at the beginning of this chapter. They are: (1) mud-brick tombs; (2) tombs of mud-brick and stone; and (3) tombs, or more accurately, cists, constructed entirely of stone.

Of these types, the first was the most common. Altogether sixty-two of the total of eighty tombs

discovered were of all-brick construction. Examples of the second type, in which mud-brick and stone were combined in the construction of tombs, number eleven. Six of this number (Tombs 53, 62, 124, 110, 108, and G36-120) possessed walls built entirely of mud-brick, but were roofed with stone slabs, while Tomb 124 is also the sole example of a peculiar "double" construction in which mud-brick walls were also lined and covered with stone slabs. The five remaining examples of Type 2 (Tombs G36-27, G36-30, G36-86, G36-110, and G36-104) have one wall constructed of stone, and the others of mud-brick, with the exception of No. G36-104, whose walls were formed of brick, topped by a single course of stones. The third type is illustrated by only seven tombs (Nos. 2, 57, 59, 202, 213, G36-26, and G36-48). These cists are characterized by walls of stone (slabs, or boulders held in place with mortar); all were roofed with stone slabs excepting Tomb G36-48, which had a cover composed of *pisé* and sherds.

All three types appear to be contemporaneous, although no tombs of our second type appear among those attributed to Stratum VIII. In this connection it is interesting to observe that a roof or cover of some kind is more typical of the earlier tombs (*viz.*, those attributed to Strata XI-A, XI, X-A, and X), than of the later ones.

In the description of the construction of the tombs which follows, the first two types have been grouped together; the few cists discovered will, however, be described separately.

Tombs of Mud-Brick, or Mud-Brick and Stone (Plates XXIV-XXVII; XLVI.b-XLIX.a). One of the most interesting features of the tombs, as well as one of the most constant, was their orientation. One of the corners of each tomb was directed to the north, with the longitudinal axis of each tomb usually pointing northwest-southeast. Eight exceptions may, however, be noted. Tombs 20 and 31 have longitudinal axes lying west-northwest by southeast; Tombs 107 and 102, on the other hand, are tilted in the opposite direction, having axes north-northwest by southeast. The significance of the orientation of these two tombs has been discussed in Section A of this chapter. No. 16 is the only tomb oriented approximately north to south,

while No. G36-86 (appearing on Plate XXIII), and Nos. 53 and E, have approximate east-west axes. In the case of the former, the orientation referred to applies to the direction of the straight wall, as this was one of the semicircular tombs which will be described in a subsequent paragraph.

As Mr. Bache already pointed out, the orientation of almost all tombs, with the exception of those mentioned above, duplicates that of the temples of Strata VIII, IX, X, XI, and XII, to which list we may now add the Northern and Central Temples of Stratum XIII, unexcavated at the time of Mr. Bache's article.¹⁶ All temples of these levels are oriented so that their corners face the cardinal points of the compass; the relationship between temples and tombs, established by their association, is thus further strengthened by the similarity in their orientations.

Almost all tombs possessed rectangular or oblong ground plans (Plates XXIV-XXVII). Exceptions to this rule are represented by Tombs 53 and 124 where, in each case, only one of the corners of the tomb is formed by a right angle; and by Nos. E, 109, and 114, where the outside walls either possess projections (No. E) or are indented. In addition, Tombs G36-34, G36-40, and G36-151, which have been attributed to Stratum XI, were all irregularly rectangular in plan. These peculiarities of shape probably have no special significance, perhaps representing whims of their builders, or adjustments of the shape of the tomb to that of the tomb shaft. However, three examples of an early type of tomb were discovered which cannot be so lightly dismissed; viz., Nos. G36-86, G36-110, and G36-122, all of which are located on Plate XXIII. These tombs were characterized by a curious semicircular plan, each tomb having a single straight wall, and a single curved wall. All three were intrusive into Stratum XII, and all have been attributed to Stratum XI. They are thus among the earliest representatives of the tomb type of burial, but they exemplify a variety of tomb that was not popular even in Stratum XI, and one that failed to survive into subsequent strata.

These three semicircular tombs were quite small, Nos. G36-86 and G36-122 having radii of but

62cm., while the radius of G36-110 was only 58cm. The diameter, or straight-wall measurement of No. G36-86 was 90cm.; No. G36-122, 1.55m.; and No. G36-110, 1.20m. Both Nos. G36-85 and G36-110 shared the feature of having their straight walls constructed of stones, the top-most course of each being of mud-brick, as were their curved walls. Tomb G36-122, however, was of mud-brick construction throughout.

Another important deviation from the far more common rectangular or oblong ground plan was illustrated by Tomb G36-104, the only tomb discovered in Stratum XII-A. This was more or less elliptical in plan, and was constructed of double rows of *libn* bricks, laid in a herring-bone pattern. Like the semicircular Tombs G36-86 and G36-110 mentioned above, this tomb had its walls topped by a course of stones.¹⁷

In size the tombs of mud-brick, or of mud-brick and stone, range from the 3.25 x 2.65m. and 3.20 x 2.30m. dimensions of Tombs 45 and 34 respectively, to the 70 x 55cm. and 75 x 50cm. measurements of Tombs 226 and 54; all figures representing exterior measurements. As a rule, the larger tombs have been attributed to Strata X and IX; those tombs having their origin in strata earlier than X, or in the first two phases of VIII, being comparatively small. This generalization is best illustrated by the members of Group VII on Plate XXII (Nos. 111, 109, 114, and 110), all of which are large, and all of which originated in Stratum X. Probably the age and importance of the person interred in the tomb was the decisive factor in determining the tomb size, for almost all of the larger tombs shown on Plate XXII (e.g., Nos. 34, 45, 46, 107, 111, 109, 114, 110, etc.), contained

¹⁷ If Plate XXIII is consulted, it will be seen that the four tombs having unconventional semicircular or elliptical shapes (Nos. G36-86, G36-110, G36-122, and G36-104) were all located at the edge of the mound in Stratum XI, spreading from Square 3-M to Square 5-J. In this location they occur north of the Stratum XI Temple (No. G36-104); in front of the Temple (No. G36-110); within the Temple (No. G36-86); and south of the Temple (No. G36-122). Their close association with this religious structure undoubtedly has some significance which, however, is difficult to evaluate. Perhaps their locations imply that they are earlier than the tombs having rectangular ground plans, which occupy less favorable positions.

¹⁶ *SA.*, Vol. 153, No. 6, p. 311.

adult burials, and all examples cited, excepting No. 107, were more or less richly furnished.

The differences in the heights of the wall of various tombs has already been discussed in connection with their stratigraphic origins. The highest tomb walls belonged to No. 45 (Plate XXIV). These extended 1.26m. up the tomb shaft; probably Tombs 109 and 114 were nearly as deep (cf. footnote 10). On the other hand, some of the tombs were remarkably shallow, particularly Nos. 54, 37, 60, and 14, all of which had walls ranging in height from 13 to 17cm. We have seen that the largest and deepest tombs were those containing adults; conversely, therefore, it is not surprising to find that the four shallowest tombs just mentioned enclosed burials of infants and children.

As regards the masonry of the tombs, the bricks used vary considerably in dimensions, and include such sizes as 41 x 20 x 10cm. (Tomb 45); 44 x 22 x 11 (also Tomb 45); 44 x 22 x 10 (Tomb 34); 47 x 23, and 48 x 24 (Tomb 114); and 50 x 25 x 10 and 51 x 26 x 10 (Tomb 107). All of these can be related to the brick sizes used in Strata VIII through X-A; while the identity in size of the bricks of Tomb 107 with those of buildings of Stratum X has already been discussed (p. 61). Other relationships may be similarly established. The 44 x 22 x 10cm. size of the bricks used in Tombs 34 and 45, for example, is duplicated by the bricks employed in the construction of the three temples of Stratum VIII-C,¹⁸ and by the bricks used in the Stratum IX Temple. The bricks of Tomb 114 were slightly smaller than those used in the construction of Tomb 107, although both tombs are attributed to Stratum X. It is, therefore, interesting to discover that the shrine erected over Tomb 107 (Room 1003 of Stratum X) had walls built of both these sizes; 50 x 25 bricks being used in the same wall, and in the same courses, as 48 x 23 and 46 x 23 centimetre sizes. Most strata produced bricks that were not regular in size, variations of two or three centimetres or even more being common, so that too much reliance cannot be placed on brick sizes as an indication of stratigraphic origins. It is only such disparate sizes as 44 x 22 and 50 x 26 that may be regarded

as indices to strata of origin. In addition, it must be remembered that the bricks of many tombs were not measured in the field, so that we are unable to check by this method their stratigraphic origins.

The walls of the tombs are usually only one brick in thickness, generally laid in courses of stretchers. The following exceptions may, however, be noted. Tombs 34 and 109 were the only tombs found having all walls built of bricks laid two courses thick (Plates XXV and XLVI.a). Tomb 114 had its irregular northwest wall constructed of bricks three courses thick; the other walls were composed of two courses. The end walls of Tomb 45 were two courses in thickness; each inside course alternately laid as headers and stretchers, with the outside courses alternating between stretchers and headers. The side walls of the same tomb were a single course in thickness, the bricks being laid as headers. In Tomb 107, however, this construction was reversed (Plate XXIV). The side walls of this tomb were composed of bricks two courses in thickness, but the end walls were a single course wide. Tomb G36-104, one of the tombs appearing on Plate XXIII, and attributed to Stratum XI, is unique in having its walls formed of double rows of mud-brick laid in a herring-bone design. Presumably the shape of this tomb, the only one discovered having an elliptical plan, necessitated such unconventional masonry. Nevertheless, it should be noted that the curved walls of Tombs G36-86, G36-110, and G36-122, all of which appear on Plate XXIII, and have semicircular ground plans, possess the usual bonding, being laid in courses of stretchers, one course thick. The bonding of Tomb 124 illustrates another deviation from the usual construction. This tomb had mud-brick walls faced with stone slabs on the interior. The walls were formed of bricks laid lengthwise, but the corners formed by the stone slabs were left exposed.

Comparatively few of the tombs constructed of mud-brick, or of a combination of brick and stone, were floored; most of their floors being formed only of the earth lying at the bottom of their respective tomb shafts. When constructed floors were found, however, they were usually made of the same mud-bricks employed in the construction of the tombs themselves. Tombs having mud-brick

¹⁸ TG., p. 24.

floors include Nos. 20, 53, 54, and possibly No. 16. In addition, No. 124, which had mud-brick walls lined and covered with stone slabs, also had a floor paved with flat stones. This, and No. G36-26, a cist, were the only tombs to have stone pavements. Two tombs, Nos. 34 and G36-34, both attributed to Stratum IX, apparently possessed wood flooring. Probably not too much attention was paid to the matter of flooring the tombs, because in many cases the occupant was placed on matting or textile, which was evidently considered an acceptable substitute (cf. p. 78).

Much more thought was given by the builders of the tombs to the methods by which they could be covered than to any other single construction detail. Roofs, or covers of some sort, are common enough to be called a characteristic feature of the Gawra tombs, even though no less than thirty-three of the eighty tombs discovered had no roof or cover. It is possible, however, that some of these may have had a cover originally but, perhaps owing to the perishable nature of the materials used, no evidence of their existence was discovered. At any rate, the tombs attributed to Strata XI-A, XI, X-A, and X are commonly covered by some material, whether bricks, matting, or stone. In contrast, a cover or roof is unusual on those tombs attributed to Strata IX, VIII-C, and VIII-B; with only four, or possibly five, of the twenty tombs attributed to the C and B phases of the VIIIth stratum possessing that feature.

Four different types of roofs or covers may be noted. These are roofs of: (1) mud-bricks; (2) stone slabs; (3) matting; and (4) wood. To take up these types in their enumerated order, we turn first to those tombs covered with mud-bricks.

Tombs with mud-brick covers are the most common, totaling twenty, and including Nos. 61, 37, G36-27, and G36-30 of Table B; and Nos. 180, G36-32, G36-46, G36-43, G36-60, G36-74, G36-86, G36-90, G36-95, G36-104, G36-110, G36-111, G36-120, G36-122, G36-134, and G36-155 of Table C (Plate XXIII). This list thus includes all three tombs having semicircular ground plans (Nos. G36-86, G36-110, and G36-122), as well as No. G36-104, the only tomb uncovered having an elliptical ground plan.

Of these twenty tombs, sixteen have been attributed to Strata XI-A and XI; the remaining four include two having their origin in Stratum X-A, and two in Stratum VIII-C. Mud-brick covers are thus far more typical of earlier (XI-A, XI, and even X-A) tombs than later ones, where matting and stone roofs take their place. This trend away from brick covers was undoubtedly influenced by a growth in the size of the tombs themselves, for it has already been observed that the larger tombs are usually those attributed to Strata X and IX (p. 71). With these large tombs it would have been difficult to cover them with a flat *libn* roof, which would have necessitated an elaborate system of support, either by wooden poles or by other means. A flat mud-brick roof would have been practical only on tombs small enough to have been covered by a single brick, or by two bricks, each held in position by the weight of the earth covering the walls on which they rested. However, in some tombs, the covering bricks rested directly upon the occupant of the tomb; as for example, in Tomb 180, a Stratum XI tomb (Plate XLVI.b, where part of the original brick cover has been removed). Whether this is due to the collapse of supports, or whether the bricks were intentionally placed on top of the body, we do not now know. In other instances, we have indications of supports beneath the mud-brick cover; as for example, in Tomb G36-104, where traces of wooden supports were found. As this tomb was the largest of those attributed to Strata XI-A and XI, its size undoubtedly necessitated some support of its *libn* roofing. Tomb G36-32 is the only tomb having a corbelled brick cover. This tomb had its origin in Stratum XI, and is thus one of the earliest examples of this construction yet discovered. Tomb G36-120, also attributed to Stratum XI, was covered with large stone slabs laid upon a brick roof; how this substantial weight was supported is not clear, but presumably wooden poles were used, which when decayed left no noticeable trace.

Stone forms the material of our second type of tomb roofs. The variety of stone employed is invariably limestone, roughly dressed into irregularly shaped slabs, which range in thickness from .075 to

several centimetres. Plate XLVII.b shows the stone cover of Tomb 124 as discovered.

Six tombs, other than the cists which will be described in Section C of this chapter, were covered with stone slabs; these are Nos. 53, 62, 124, 110, 108, and G36-120. Of these, No. 53 alone was covered with a single slab; the other five tombs were much larger, and consequently required several stones. One of the six tombs listed has been attributed to Stratum XI (No. G36-120); it is the only tomb having a roof formed of a combination of bricks and stone. The remaining five tombs have been attributed to Strata X and IX. Since none of the cists with stone slab covers have been attributed to strata earlier than X, this type of roof may be regarded as characteristic of the later tombs only; that is to say, of tombs having their origin in Strata X, IX, and VIII.

The third material employed to cover tombs, matting, was definitely used in nine tombs (Nos. 45, 31, G36-36, 34, G36-44, 102, G36-34, G36-146, and 107), and may have been employed in two more (Nos. 7-9 and G36-14), where the remains of matting found on the floor may represent a collapsed matting roof. Only one of the tombs (G36-146) listed above has been attributed to Stratum XI; four have been assigned to Stratum X; three to Stratum IX; and three to Stratum VIII. The use of matting as a tomb cover is therefore much more typical of the late tombs (that is, those attributed to Strata X, IX, and VIII), than of the early ones having their origin in Strata XI-A and XI. Both stone and matting are, accordingly, late innovations in tomb roofing, and they supersede to a large degree the brick covers. There is evidence, however, that in two instances both mats and bricks were used to cover tombs. These tombs are Nos. G36-44 and 31; the former had its *lion* cover laid upon matting or a heavy textile. In Tomb 31 pieces of bricks with clear traces of matting were found both above and below the skeleton; this was probably, although not certainly, part of the matting and brick cover. In three other tombs (Nos. G36-34, G36-36, and G36-146), the mat roofs had been covered with *pisé* before the tomb shafts were filled in with earth. In Tombs G36-14 and 7-9, both of which are listed in Table B, traces of mat-

ting were found upon the floors, and over the burials they contained. Whether these traces represent matting covers of the tombs, or only the remains of matting laid on the bodies, could not be determined.

The evidence of matting roofs was less ambiguous in the remaining tombs (Nos. 45, 102, 107, and 34), where in every case the mats used were large enough to extend over all four walls of the tomb, and were held in place by the topmost course, or courses, of bricks in the tomb walls. No. 34 is the only tomb where it is certain that more than one mat was employed to form the roof (Plate XXV). Two mats were used in this tomb, one of these being held in position by the two upper courses of all four tomb walls; the other mat covered the tomb at the top of the walls, but how this was held in position is not now clear. Plate XLVII.a shows an impression of the reed matting recovered from this tomb; the twilled pattern is characteristic of all mat impressions found in the tombs. Each of the mats of Tomb 34 was covered with an irregularly woven cloth, with 12 to 14 strands in the woof, and from 8 to 10 in the warp, per centimetre (Plate XLVIII.b). The lower cloth, like the mat which it covered, extended into the walls of the tomb between the second and third topmost courses.

None of the other tombs employing mats as roofs had them secured by the tomb walls in precisely the same simple manner as Tomb 34, or used more than a single mat to form the tomb cover. The builders of Tombs 45, 102, and 107 resorted to varying devices to hold the mat covers taut over the interior of the tombs, but all three of these tombs have one construction feature in common. In these tombs, after the walls had been constructed to the desired height, an extra course of bricks (or two courses in the case of Tomb 45), was laid upon the long walls only. This extra course, or courses, was offset; that is, the bricks were set back a few centimetres from the inside surface of the tomb walls, thus forming on the interior a slight ledge, but projecting out from the exterior wall surface (Plate XXIV).

The offset courses of Tombs 45, 102, and 107 are, however, their only common characteristic, for in each tomb different means were then employed to support the mat. The ledges on the long walls

of Tomb 102, for example, were directly utilized to stretch the mat cover, for in this tomb wooden poles were laid upon the ledges parallel to the long walls. The poles thus rested upon the matting, the ends of which were then brought up to rest upon the upper surfaces of the bricks forming the offset course. A hard, fine plaster was then spread over the borders of the matting to hold them down, and to assist in holding the matting tightly stretched across the tomb.

A somewhat similar arrangement was found in Tomb 45 (Plate XXIV). Here, although wooden poles were not laid on the ledges as in Tomb 102, much the same result was achieved by permitting the mat cover to be held between the two offset courses loosely enough so that the mat rested directly upon the ledges. The builders of Tomb 45, however, did not consider this sufficient support for the mat cover. A single ridgepole hole in the center of one of the long walls of this tomb, just below the top offset course, shows that the ledges of this tomb were utilized still further. This ridgepole, which must have rested upon the ledge opposite, apparently imparted a slight gable effect to the matting, on one side of the tomb at least. On the other side, however, the earth fill of the tomb shaft must have rested upon the ledge, from which it was separated only by the matting cover.

The system employed in roofing Tomb 107 was even more complicated (Plate XXIV). Two cross-post holes were found set into the walls of this tomb, but these were quite low, one occurring only 7cm. above the tomb floor, and the other 26cm. above the floor, but in the other side of same wall. Just below the topmost course of this wall, but in its center, was found another post hole, which must have held the ridgepole. No post holes of any kind were discovered in the opposite wall, but on this side of the tomb enclosure were one or two post holes in the floor. These may have held vertical posts, upon which the cross-poles rested, but such speculation is extremely hazardous. At any rate, it is certain that some kind of gabled cover existed directly over the occupant of this tomb, for the position of the three post holes in the end wall of the tomb permits no other interpretation. These poles may or may not have been supported at their

opposite ends by vertical posts set into the floor, as has been suggested above, but another problem is presented by the matting. We know that the ends of the matting were held by the top (offset) course of bricks, but whether this mat was permitted to rest upon the wooden gable construction within the tomb or, as seems more likely, a second mat (or a cover of some other material) was employed for this purpose, we cannot now determine. Probably of greater significance than these details is the fact that such an elaborate roof was constructed for this tomb. Such a feature can be regarded only as further proof of the importance of the person it contained (cf. p. 60).

The fourth type of material used in roofing tombs was wood. Two tombs contained traces of a wood layer, Nos. 109 and 114, but in both of these the precise nature of the cover can only be surmised. Plate XLVIIIa shows traces of the white ash of the wood cover inside Tomb 114, which was apparently supported by cross-poles, as some evidence for the existence of these was discovered between the second and third courses from the top of the walls. Tomb 109, however, contained no post holes, with only a wood layer measuring 1.17 x .65m. resting over the skeleton and completely covering it, except for the skull and one hand, which had been raised to the mouth. It may be, therefore, that this wood layer is the remains of a coffin rather than a roof, but as no mention is made in the field notes of a wood layer having been found underneath the skeleton, it seems fairly certain that a collapsed wooden roof is represented. In both Tombs 109 and 114, it could not be determined if the wooden roofs had been flat, or whether they were gabled.¹⁹

Cists (Plate XLIX). Tombs constructed entirely of stone number but seven. Of this number, one cist has been attributed to each of Strata XI, X, and IX; and four to Stratum VIII-C. This distribution thus shows a limited popularity of the cists in Stratum VIII-C, but they are too few in number to attach any particular significance to this fact.

¹⁹ The description of the roofs of the tombs appearing in *BASOR.*, 57, pp. 17-18, and in *SA.*, Vol. 155, No. 6, p. 311 appears to be based on information gathered from various tombs; no single tomb furnished all the evidence described.

Cists were unknown in strata overlying VIII-C, unlike tombs of other types, which survived through Stratum VIII-B.²⁰

Four of the seven cists discovered were constructed entirely of stone slabs; these are Nos. 2 (Plate XLIX.a), 59, 202, and G36-26. One cist, No. 57, utilized one or two slabs in the construction of its walls, the rest being formed of roughly dressed stones. No slabs were employed in the construction of Nos. 213 (Plate XLIX.b) and G36-48, their tomb enclosures being formed entirely of stones held in place with mortar. Limestone slabs or boulders were always used.

The largest cists were Nos. 2 and 202, which had exterior measurements of 115 x 80 and 110 x 90cm. respectively. Orientation of the cists in every case followed the same northwest-southeast longitudinal axis characteristic of most tombs of other types. Only one cist had a floor. This was No. G36-26, which had a floor of stone covered by matting. All cists, however, had a roof of stone slabs, the only exception to this rule being No. G36-48 (Table C), which was attributed to Stratum XI. This cist had a cover formed of a mixture of sherds and *pié*.

C. PHYSICAL REMAINS AND BURIAL CUSTOMS (PLATES XXVI, XXVII, L-LII.a)

With this section we proceed to an examination of the contents of the tombs, having been occupied in Section A with the stratigraphic origins of the tombs, and in Section B with details of their construction. Here the physical remains contained by all types of tombs, whether constructed of brick, brick and stone, or of stone alone, will be considered together, as it is no longer necessary for our purposes to differentiate among them.

The physical remains of seventy-nine persons were found in seventy-two tombs. In the remaining eight tombs the number of occupants is unknown, their contents having been disturbed and robbed. Assuming each of these disturbed tombs to have contained only a single burial, we should then have

²⁰ The cist burial (No. 2) described in *TG.*, p. 143 is Tomb No. 2 appearing on Plate XXII, which has been discussed in the present section. Likewise, No. 5 of *ibid.*, a mud-brick tomb, is our present Tomb 5, also appearing on Plate XXII, and described in this chapter.

a total of seventy-five tombs containing the remains of one person each; three tombs containing double burials; and two tombs with triple burials, or a total of eighty-seven persons for all the Gawra tombs. This number can represent only a very small percentage of the total population of Gawra in the seven strata of VIII-B through XI-A; the significance of this fact has already been discussed at the end of Section A of the present chapter.

Before turning to details of the burials enclosed by the tombs, an examination of some of the aspects of the double and triple burials is necessary. Three tombs contained double burials: Nos. 25, 29, and 30 (Plates XXVI and L.b), of which No. 29 has been attributed to Stratum VIII-B, while the other two have been found to have had their origin in Stratum VIII-C. Only two tombs containing triple burials were discovered, Nos. 111 (Plate L.a) and G36-122; the former originated in Stratum X, and No. G36-122 in Stratum XI. Apparently, therefore, the triple burials are a feature of the early tombs, while double burials are found only in tombs ascribed to Stratum VIII. However, a link between the double and triple tomb burials is found in the fact that Nos. 25 and 111 were units of double tombs; that is, they were joined by common walls with Tombs 24 and 109 respectively. Further similarities between the double burial of Tomb 25, and the triple burial of Tomb 111 have already been pointed out by Mr. Bache, their excavator.²¹ Both tombs contained only beads as furnishings for their occupants, with the exception of a single plain gold rosette in Tomb 25, although the tombs containing a single occupant each, with which they were joined (Nos. 24 and 109), were richly furnished (Plate XXVII). Both tombs containing multiple burials were located northwest of their companion tombs, and their occupants lay at the feet of the single occupant of each of Tombs 24 and 109. An inferior social standing thus seems indicated for all persons in Tombs 25 and 111, but whether they were slaves, serfs, or the wives of the persons interred in Tombs 24 and 109 cannot be determined. As each double tomb is, however, a single structure, having been built and occupied at the same time, we must have in Tombs 25

²¹ *S.A.*, Vol. 153, No. 6, p. 312.

and 111 either the victims of human sacrifice, or of war or plague.

The remaining tombs containing multiple burials, viz., Tombs 29, 30 (Plate XXVI), and G36-122, probably contain mother and child burials. In every one of these tombs an infant or child (or in the case of the triple burial of No. G36-122, two infants), was interred with an adult. They represent, therefore, in all probability deaths in childbirth, like the occupants of the grave, Locus 7-66, sunk into Stratum XVIII (p. 112), or the prey of the epidemics or plagues which must have been all too common in prehistoric times. It is of interest to note that Tomb G36-122, enclosing a triple burial, had a semi-circular ground plan, being one of the three representatives of that tomb shape discovered.

various orientations, and lists the number of times the skeletons were found on either the right or left side. The first direction given is that of the head.

It is apparent, consequently, that the orientation of the bodies within the tombs was changed about the time of Stratum X-A; in this connection it will be of interest to compare the orientation of the occupants of the graves in the same, as well as in preceding strata (Chapter III, Table C, p. 113).

Table E also shows that the body lay on its left side in no less than forty-two instances, compared with only seventeen instances where it had been placed on its right side. The left-side position is, therefore, characteristic of the tomb burials of all strata. In only two tombs was the

TABLE E

Stratum of Origin	ORIENTATION OF SKELETONS				POSITION	
	SE-NW and NW-SE	SW-NE and NE-SW	W-E and E-W	N-S and S-N	Left Side	Right Side
VIII-B	3	0	0	0	1	1
VIII-C	11	6	1	1	13	5
IX	6	0	2	1	4	3
X	9	1	2	0	9	1
X-A	4	0	0	0	2	0
XI	3	0	7	12	13	6
XI-A	0	0	1	0	0	1

In regard to the details of all tomb burials, no definite rules applied for the orientation of the body, or for the direction the body faced (Plates XXVI, XXVII, LI, LIIa). However, since most tombs were oriented on a northwest-southeast axis (p. 70), most of the heads of their occupants accordingly lay either northwest or southeast (cf. Plates XXVI and XXVII). In some cases, however, particularly in those tombs containing double and triple burials (Plate XXVI, Tombs 25 and 30), the bodies were laid across the width of the tomb, thus achieving a southwest-northeast, or northeast-southwest orientation. Moreover, in the early tombs the bodies were placed diagonally within the enclosures, rather than parallel to the tomb walls; hence a north-to-south or east-to-west alignment of the body is more characteristic of these examples (cf. Plate XXVII, Tomb G36-111). Table E summarizes the stratigraphic distribution of these

occupant found resting on his back, viz., Tombs G36-14 (Stratum X) and G36-95 (Stratum XI). In both cases such an unusual position may be accounted for by a disturbance of the body after burial; as, for example, through the collapse of the roof, or by similar means.

The arms of the deceased are almost always bent, with the elbows usually resting in front of the chest or abdomen, and the hands are usually held in front of, or on, the neck or face (cf. Plates XXVI and XXVII). Five tombs, however, contained skeletons whose arms had been placed at the sides of the body (G36-14 of Stratum X; Nos. G36-74, G36-86, G36-100 of Stratum XI; and No. G36-155 of Stratum XI-A). In addition, the occupant of No. 53, from Stratum IX, had his arms extending away from the body.

Leg contraction is another feature of the tomb burials. Only two had the legs extended (Nos. 54

and G36-46, Strata IX and XI). In all other cases contraction of the legs is the rule, varying only in degree. The occupants of only four tombs had the legs slightly contracted; in thirty-seven instances the legs were placed in positions of medium contraction; and in twenty burials the legs were sharply contracted (Plate XXVII).²²

Infants and children occupied most of the tombs. Of the sixty-nine skeletons which could be examined and their relative age determined, forty-four were of infants and children, and twenty-five of young and mature adults. No adults had been entombed in the cists. The tombs containing adult burials are as follows: Nos. 29 (1), 31, 30, 25 (2), 24, 46, 34, 107, 111 (3), 109, and 114 of Table B; Nos. G36-74, G36-95, G36-104, G36-110, G36-120, G36-122 (1), G36-134, G36-135, and G36-150 of the early tombs listed in Table C. In addition, Tomb 62 and 18 also may have contained adults, but their bones had been so disturbed that this fact could not be definitely established.²³

Two details of the tomb burials remain to be described. The first of these is the cover or wrappings placed on the corpse, wrapped around it, or placed underneath. The occupants of eleven tombs had been laid on reed mats. These tombs are Nos. 29, 60, 65, 5, 209, 171, 7-9, G36-14, G36-30, 249, and G36-60, all of which have been attributed to Strata VIII-B through X-A, excepting the last, which was of Stratum XI origin. In four tombs (Nos. 20, 16, 30, 53) the skeletons were found to have been wrapped in matting, while in two others (Nos. G36-36 and G36-40) the occupants had been wrapped in cloth. Mats had been placed over the occupants of Tombs 64, 31, 46, and G36-46.

Undoubtedly the mats found underneath the occupants of the ten tombs enumerated above were intended to take the place of other flooring (p. 72). Likewise, the matting or textile wrappings or coverings found on the occupants of the nine tombs

listed above may have been substituted in lieu of a tomb roof, for only two of these nine tombs (Nos. G36-36 and 53) possessed a roof or cover. The practice of placing the occupants of the tombs on mats, or of covering and wrapping the corpses in matting or cloth, is much more characteristic of the later tombs, and particularly those originating in Strata VIII-B, VIII-C, and IX, than of earlier ones. Of the twenty tombs where matting or textile was found on or under the skeletons, no less than thirteen are of Stratum VIII origin; while three have been attributed to Stratum IX, two to Stratum X, and one each to Strata X-A and XI.

There is no definite evidence that wooden coffins were ever used in the tombs. Two tombs (Nos. 34 and G36-34), both attributed to Stratum IX, contained traces of wood on their floors, but as no remains of wood were discovered on the skeletons, it seems more probable that the wood formed part of the flooring. In addition, Tombs 109 (Plate XXVII) and 114 also contained traces of wood which were probably the remains of collapsed wooden roofs.

The only detail of the tomb burials not yet discussed is the custom of placing pigment on the body (cf. Plate XXVII). Evidence of this interesting custom was discovered in only eight tombs; Nos. 29, 31, 30, 24, 46, 109, and 110. All these tombs contained adult burials, but No. 29, which contained a double burial of an adult and child, had the pigment on the child alone, while in No. 30, which also enclosed an adult and child burial, the pigment was found on the body of the adult. It will be recalled also, that No. 24 is a unit of the double tomb formed by the joining of Nos. 25 and 24. The fact that the pigment is found on the single occupant of No. 24, and not on either of the two skeletons within No. 25, is further evidence of the social eminence of the individual in Tomb 24, and the lower estate of the persons entombed in No. 25. The application of pigment to the body was probably intended as a mark of distinction. This hypothesis is supported by the fact that pigmented skeletons were found only in richly furnished tombs. The only exceptions to this rule are Nos. 46, which had been robbed, and 30, which contained no objects of any kind, although probably undisturbed.

²² These general terms of slight, medium, and sharp contraction refer to the angle formed by the vertebrae and the femora. When this angle approximated 110 to 140° the contraction has been termed slight; if from 70 to 110°, medium; and if from 45 to 70°, sharp.

²³ No data on the sex of the individuals found in the tombs, nor any anthropometric measurements are available.

Pigmentation of burials is typical only of the tombs attributed to Strata VIII-B, VIII-C, and X, with a single pigmented burial belonging to Stratum VIII-B (No. 29); four to Stratum VIII-C (Nos. 31, 30, 24, and 46); and two to Stratum X (Nos. 109 and 110).

The colors employed are always green or blue, with the exception of Tomb No. 29, where green, red, and blue pigments were found. Two tombs (Nos. 24 and 110) had patches of both green and blue; two others (Nos. 31 and 30), green only; while Tombs 46 and 109 contained only blue. In four instances (Nos. 29, 31, 24, and 110) the pigment was found on the chest of the skeleton; in two other tombs (Nos. 30 and 46) the pigment lay on the skull. The occupant of Tomb 109, on the other hand, had a band of pigment upon his skull which extended across his chest and forearm. The occupant of Tomb 110, in addition to having a band of blue and green pigments on his chest, had another patch on one of the femora (Plate XXVII).

Mention may also be made of the occurrence of grain in three tombs. Two contained grains of barley (Nos. 60 and 124), while No. 62 yielded the charred remains of wheat. A few animal bones were discovered in Tomb 31. All were probably remains of food offerings.

D. TOMB FURNISHINGS (PLATES LII,b-LXI; CIII-CVIII)

This section deals with the objects found in the tombs. Such objects may have been articles of personal adornment, mortuary gifts, or objects habitually used in life by the occupants of the tombs, but such broad functional classifications are too vague and fallible to provide a framework for the present discussion. It has seemed more practical to group the objects from the tombs on the basis of the material employed in their manufacture, such as pottery, stone, bone, gold, etc., with typological subdivisions under these main headings. This method will be followed when the objects recovered from occupational debris and simple graves of the various strata are dealt with, so that uniformity of treatment will thus be achieved with respect to all objects of Gawra. This system of classification by material, however, has had to be abandoned in

favor of a typological classification in the case of seals, and beads and pendants, where materials of various kinds were employed. The headings which follow are, therefore, Pottery, Stone, Bone and Ivory, Seals, Beads and Pendants, Copper, and Gold and Electrum.

As a result of the grouping of the tomb furnishings by material, the contents of many tombs have been dispersed under several headings. Table F has, consequently, been appended at the end of this section, listing the tombs in stratigraphic order, together with the objects that each one contained.

Pottery (PLATE CIII, FIGS. 1-6)

Vessels made of baked clay are much less common in the tombs than might be expected. Only fourteen pottery vessels were found accompanying tomb burials, but these are most important for purposes of checking the stratigraphic attributions of the tombs, as the attributions made in Section A of this chapter were made without regard for the objects contained by them.

Of the fourteen pottery vessels found, three bore painted decoration; two were burnished; and the others were completely undecorated. The occurrence of painted pottery in the tombs is somewhat surprising, for painting as a decorative technique is all but abandoned with the end of Stratum XII, and none of the tombs has been attributed to so early a stratum. All but one of the painted and burnished pottery vessels come from tombs attributed to Strata XI-A and XI. These strata are generally characterized by unpainted pottery, but some painted vessels have been found in their debris, while burnished examples in the same strata are quite common. Relationships between the pottery of the tombs on the one hand, and that of Strata XI-A and XI on the other do, therefore, exist.

To proceed to specific examples, two of the three painted vessels found in the tombs are not illustrated, but were identical in shape and decoration with Fig. 235 of Plate CXXXIII, a bowl from Stratum XII-A. This particular type of painted bowl is typical of Strata XII-A and XII, but the specimens under discussion were discovered in Tombs G36-68 (attributed to Stratum XI), and G36-150 (at-

tributed to Stratum XI-A). On the basis of this evidence an origin in Stratum XII would seem to be indicated for these two tombs; however, since Tomb G36-68 was intrusive into Stratum XII, it can hardly have originated in the same stratum. The painted bowls found in Tombs G36-68 and G36-150 must consequently represent either later imitations or carry-overs of a type which is characteristic of earlier strata. Perhaps because they were rare in those strata, they were for precisely that reason included in the tomb furnishings.

The remaining painted vessel comes from Tomb G36-104, and is shown in Plate CIII, Fig. 1. This tomb has been attributed to Stratum XI, but the pot in question is again a more typical representative of Stratum XII and XII-A products in particulars of shape, decoration, and ware. On the other hand, it should be noted that cross-hatched painted designs are also found in Stratum XI (Plates CXLV, Fig. 398; CXLVI, Fig. 408; CXLVIII, Fig. 433), while the shape of the present specimen is duplicated by Figs. 412 and 415 of Plate CXLVII, from Strata X-A and X, respectively.

Tomb G36-104, in addition to the painted pot just discussed, also yielded a deep bowl of gray-black ware, which was undecorated except for faint burnishing on the exterior. This bowl, illustrated in Fig. 2, has a shape characterized by a round base, and sloping shoulders contracting to a flat rim. The burnishing technique is common only in Strata XI through IX, and particularly in Stratum XI, where it is found almost exclusively on gray or black wares (cf. Chapter IV, p. 155). The shape of this vessel, on the other hand, is closer to those of XII-A and XII specimens; cf. Plate CXXXIII, Figs. 235-237. But the contracted shoulders of the bowls illustrated in Plate CXLI, Figs. 336, 338, and 339; and Plate CXLIV, Fig. 381, all of which are from Strata XI-A and XI, should be noted, since they furnish later analogies to this feature in the present specimen. A pottery bowl found in Tomb G36-111 at the foot of the skeleton (cf. Plate XXVII), was identical in shape with Fig. 2, but was of undecorated green ware. This tomb, like No. G36-104, has been attributed to Stratum XI.

The undecorated bowl from Tomb G36-150, shown in Fig. 3, is identical with one discovered

in the occupational debris of Stratum XI-A (Plate CXLI, Fig. 335), to which stratum this tomb has been assigned. Tomb G36-150, therefore, contained one painted pottery vessel, and one undecorated, of which the latter can be definitely related to Stratum XI-A wares. The attribution of this tomb to Stratum XI-A may therefore be considered as confirmed, despite the occurrence of a painted vessel within it having no strong XI-A parallel.

Fig. 4 was found in Tomb G36-60, attributed to Stratum XI. It is a small jar of brown ware, with a mottled exterior, and characterized by a flat base, nearly globular body, wide neck, and wider splayed rim. All these features, except the flat base, are duplicated in the jars shown on Plate CXLVII, Figs. 420-425, which come from Strata XI through IX, and the attribution of Tomb G36-60 to Stratum XI may thus be regarded as approximately correct.

In Tomb G36-146 an undecorated bowl of hemispherical shape was found, which was made of light brown ware (not illustrated). Bowls of similar shape and ware were produced by Stratum XI (Plate CXLIV, Figs. 372 and 373), to which this tomb has been assigned. This simple vessel outline is, however, also found in Strata XI-A, X-A, and IX, so that not too much reliance can be placed on the Stratum XI parallels alone.

Additional bowls were discovered in Tombs 102 and 124, attributed to Strata X and IX, respectively; the Tomb 124 specimen is shown in Fig. 5. These bowls had flat bases, and straight, or slightly incurved sides; coarse red and brown wares were used. This type of bowl is typical of Strata XI through IX, as well as of Stratum VIII (Chapter IV, p. 155), and is even found as early as Stratum XI-A (Plate CXLI, Figs. 328, 338, and Plate CXLIV, Figs. 367-371). It is therefore of little assistance in verifying the stratigraphic attributions of these two tombs, although it is true that these bowls are more typical of Strata XI through IX than of earlier or later levels.

The wide-mouthed jar illustrated in Fig. 6 has a slight ring base and two pairs of holes, presumably for suspension, on opposite sides of the rim. Made of grayish green ware, the exterior is lightly burnished. It was discovered in Tomb 111, which is

joined with Tomb 109; both tombs have been attributed to Stratum X. The only parallel to this vessel was discovered in as late a context as Stratum VI, and even in that level was described as an unusual form.²⁴ A comparison of a Stratum VI vessel with one from Tomb 111 is a pointless undertaking, for it is impossible that Tomb 111 could have originated in any stratum later than IX (cf. Table A). We are compelled, as a consequence, to regard the similarities between the two as resulting from chance.

In addition to the vessels listed and described in the preceding paragraphs, a single bowl was found in each of Tombs G36-105 and G36-155, while a pot was discovered in Tomb G36-135. These three vessels were all undecorated, but further details of their shapes and wares are lacking. It will be observed, however, from the preceding account, that pottery vessels are a commoner article of tomb furniture in tombs attributed to Strata XI-A and XI than in later ones. As a matter of fact, only two of the Stratum X tombs (Nos. 102 and 111), and only one attributed to Stratum IX (No. 124) contained pottery vessels. Pottery is completely lacking in those tombs contemporary with Strata VIII-C and VIII-B. Stone vessels appear to have taken the place of those made of pottery in most tombs originating in Strata X-A through VIII-B.

A group of five spindle whorls from Tomb 169 (of Stratum IX origin) completes the list of pottery objects discovered in the tombs. Tomb 169 had been, apparently, thoroughly robbed in antiquity, for no bones or objects were found within it except these whorls. They are, therefore, in all probability, later intrusions rather than part of the original tomb furnishings.

Stone

(PLATES LII.b-LIII; CIII-CIV, Figs. 7-24)

Stone objects constitute one of the most extensive and important classes of furnishings found in the tombs. Seals, and beads and pendants of stone will be discussed under those headings, together with their counterparts in other materials, but no less than six types of stone objects from the tombs are to be described here. These are: Vessels; "Hut

Symbols"; Spheres; Mace-heads; Whetstone; and Obsidian Blades and Cores. Vessels form the largest single group of stone objects, and our attention is consequently directed first to them.

Vessels (Plates LII.c-LIII; CIII-CIV, Figs. 7-19). Stone vessels were found in Tombs 45, 24, B, 31, 102, 109, and 114. Tomb 45 had its origin in Stratum VIII-B; Tombs 24, B, and 31 originated in Stratum VIII-C; while the three remaining tombs, Nos. 102, 109, and 114, had their source in Stratum X. Stone vessels, therefore, are unknown in tombs antedating Stratum X, and in addition, have not been found in any of the fourteen tombs attributed to Stratum IX, perhaps because no less than eight of the fourteen had either been robbed or were completely devoid of objects.

It is significant that the complete disappearance of pottery vessels from the tombs, beginning with those attributed to Stratum IX, is preceded by the first appearance of stone vessels in tombs of Stratum X date. At first glance, this might be regarded simply as a technological shift away from pottery to stone; it has, however, a further complication. The stratigraphic distribution of stone vessels in the tombs supplements, rather than duplicates, the stratigraphic distribution of stone vessels in occupational débris. No stone vessels have been found in the building remains of any stratum later than XI (cf. Chapter VIII, p. 73), while we have just learned that the same type of object is unknown in tombs having origins earlier than Stratum X.

It is not easy to find an explanation for this odd fact. It may, however, be evidence of an archaizing philosophy which presumably had its inception in Stratum X, and the phenomenon could thus be interpreted as having a cultic character. On the other hand, the explanation may lie in a simple change in the function of the stone vessels. In strata preceding X stone vessels were a common household utensil, and as such are uninspired articles, lacking any high degree of craftsmanship. Beginning with Stratum X, however, stone vessels may have been made only for decorative and esthetic purposes, and as *objets d'art* found a place among other tomb furnishings. This hypothesis is best illustrated by the types of stone employed in the manufacture of vessels, which in strata earlier than X-A

²⁴ *TG.*, Plate LXIX, Fig. 122, and p. 54.

is usually marble, a variety of stone easily procurable around Gawra. Beginning with Stratum X, however, the Gawra craftsmen combined unusual skill and a highly developed sense of esthetic values with imported varieties of stone that increased the value and the attractiveness of the finished product. Thus, of the sixteen stone vessels discovered in tombs dating to Strata X through VIII-B, three were made of alabaster; four of translucent green serpentine; three of oölitic limestone; two of obsidian; and four of marble, mostly uncommon, variegated varieties. The common occurrence of gold objects in some Stratum X tombs after an almost complete absence in earlier strata is another example of technological change, while the relegation of pottery and seals to a numerically and artistically inferior status are further reflections of the transformation of Gawra industry which occurred roughly at the time of Strata X-A and X. In the case of seals, their vertical stratigraphic distribution and the reasons for their decline in popularity in Strata X-A through IX will be discussed in detail in Chapter VI.

Whether or not this interpretation of the evidence is correct, there can be no denial of the fact that many of the stone vessels found in tombs rank high among the products of Gawra craftsmen in any period. Perhaps the finest of the stone vessels accompanying burials in the tombs are the obsidian spouted bowl (Fig. 7 = Plate LIII.c), and the obsidian spouted jar (Fig. 8 = Plate LIII.b), both of which were discovered in Tomb 102 (Stratum X). These were found next to the arms of the adult occupying the tomb (cf. Plate XXVII), and are the only two vessels made of this variety of stone found at Gawra. Indeed, obsidian vessels are extremely rare in all periods and at all sites in Mesopotamia, with only a few fragments of vessels made of the same variety of stone having been discovered at Uruk;²⁵ a single rough vase dating to the Halaf period at Arpachiyah;²⁶ and some bowls of a later date from Ur.²⁷

The obsidian employed in the manufacture of Fig. 7, the spouted bowl, is a greenish-black variety,

²⁵ Jordan, *UVB.*, III (1930-31), Plate XX.a.

²⁶ *Ar.*, Plate V.c.

²⁷ *UC.*, p. 379.

the walls of this vessel having been ground down to a point where they were translucent in strong light, being from five to six millimetres thick. The bowl was probably roughly shaped from a large core by chipping, and then ground into its present form with the use of fine sand or other abrasives. The surfaces are smooth without any marks or striations resulting from manufacture, although the grinding of a lump of volcanic glass into a perfect shape and finish must have constituted a remarkably long and tedious task. The shape is roughly hemispherical, slightly contracted at the rim. This outline resembles the pottery vessel illustrated on Plate CXLI, Fig. 340, which was, however, discovered in Stratum XI-A. Tomb 102, in which these two obsidian vessels were found, had its origin in Stratum X, although it is possible of course that the obsidian vessels had been made in some stratum earlier than X, and had been carried over, perhaps as heirlooms. While the shape of the pottery bowl shown in Fig. 340 is identical with that of the obsidian bowl, Fig. 7, the spouts differ widely. That of Fig. 340 is larger; is joined to the body at a more acute angle; and is a closed spout, while the spout of the obsidian bowl is of the open, or channel, type. The spout of Fig. 7 is incomplete, but probably was not much longer originally than now. The presence of a spout may indicate that this was a drinking vessel, similar to the spouted pottery cups illustrated on Plate CXLI, Fig. 342, from Stratum XI-A, and Plate CXLV, Fig. 391, from Stratum X.

Both obsidian vessels from Tomb 102 were completely smashed when discovered. This circumstance was repeated in the case of numerous objects in various tombs of all strata, and it was at first presumed by the excavator that a practice of ritualistic destruction was responsible. Later, however, it was learned that the shattering of objects in the tombs, as well as the disturbance and destruction of the bones of their occupants, was due instead to the collapse of tomb roofs which, as we have seen in Section B of this chapter, were usually constructed of perishable materials such as mats or wood.

The spouted obsidian jar illustrated in Fig. 8 (=Plate LIII.b) is of larger dimensions than its

companion (Fig. 7), measuring 10cm. in height, and 11.6cm. in diameter. The spout is also much longer, extending 7cm. from the body, and is thus a much more prominent feature than on our previous example. The spout, and that part of the rim lying above it, had been broken off in antiquity, and had been repaired by boring five pairs of holes, each pair connected with grooves, by means of which the fragment was held in position with thongs. Some of these repair holes and grooves may be seen in Plate LIII.b. The shape of this spouted jar finds an analogy in the pottery vessel illustrated in Plate CXLVII, Fig. 415, from Stratum X; this, however, is not spouted. No spouted vessel of similar shape made of pottery or stone has yet been found at Gawra. The craftsmanship of the present specimen is not quite of the same high order as that of the spouted bowl, Fig. 7. The walls of the spouted jar, for example, are thicker, varying from four to eight millimetres, so that the translucent quality of Fig. 7 is not shared by the present object. Furthermore, the surfaces have not been polished to the same degree as the spouted bowl. Nevertheless it is, if only by virtue of its material, a remarkable product of a remote age.

Tomb 109, like Tomb 102, has been attributed to Stratum X, and was furnished with three stone vessels, Figs. 9, 10, and 12. The pot shown in Fig. 9 (=Plate LIII.d), and the bowl shown in Fig. 10, were found one on each side of the feet of the skeleton in this tomb (cf. Plate XXVII), but the position of the jar, Fig. 12 (=Plate LIII.f), was not noted. The pot, Fig. 9, is squat in shape, with a flat base, and a notched band encircling the opening. The stone employed is an unusual oölitic limestone. The bowl illustrated in Fig. 10 is made of white marble; it is hemispherical in outline (cf. Plate CLXXXI, Fig. 89 for another white marble bowl of similar shape from Stratum XI-A) with no other features save a single hole well below the rim, the purpose of which is not clear. Also of marble is Fig. 12, but a black variety of this stone, with white veins, was selected in this instance (Plate LIII.f). The shape of this vessel has no analogies in stone vessels found in occupational débris, but is paralleled by a number of pottery jars discovered

in Strata XI-IX; cf. Plate CXLVII, Figs. 418-425. The chief attraction of this vessel, however, lies in the color and quality of the stone from which it was formed.

Two stone beakers were discovered in Tomb 110; Figs. 13 (=Plate LIII.e) and 14. These lay close to the southwest wall of the tomb, away from the body (cf. Plate XXVII). Both were made of dark green serpentine, and both are elliptical in plan. The beaker shown in Fig. 14 has a flat base, and high, slightly curved sides. The shape of Fig. 13 is more graceful. The base is rounded, with the body carinated just above the base, from which point the sides expand to the rim. Again, no parallels in stone vessels from occupational débris have been discovered, but these beakers—particularly the one illustrated in Fig. 13—are similar to the pottery beakers characteristic of Strata XI through IX (cf. Plate CXLV, Figs. 392-98). Tomb 110, in which these stone beakers were found, has been attributed to Stratum X.

A single stone jar (Fig. 11), was found in Tomb 24, at the head of its occupant. This is small enough to be described as an ointment vessel, since it measures only 41mm. in height. It is made of oölitic limestone, as are Figs. 9 (=Plate LIII.d), and 16.

Tomb 31, like Tomb 24 of Stratum VIII-C origin, contained the most stone vessels, having been furnished with four. The first of these is a unique double bowl made of gray (Mosul) marble, and illustrated in Fig. 15. This is the only stone vessel found in a tomb where a common, local variety of stone was employed in its manufacture; perhaps its unparalleled double feature was considered sufficient to warrant its inclusion in the tomb furniture. Fig. 16 shows a small ointment vessel of a shape similar to that of the double bowls of Fig. 15. It is, however, made of oölitic limestone, and was found near the left hand of the occupant of Tomb 31. Fig. 17 is another small ointment vase, this time of alabaster. Fig. 19 (=Plate LIII.a) is the finest member of the Tomb 31 collection, and ranks close to the serpentine beakers of Tomb 110 (Figs. 13 and 14) and the spouted obsidian vessels of Tomb 102, although it is much smaller than any of these vessels. It is made, like Figs. 13, 14, and 18, of translucent

dark green serpentine, highly polished. This bowl is in outline very similar to the units of Fig. 15, from the same tomb, but the unique feature of the present specimen is its spatulate handle.

The remaining stone vessels were found in Tomb 45. This tomb had been thoroughly robbed in antiquity, but a small ointment pot, a fragment of a bowl, and two fragments of a large jar, all of stone, were spurned by the thieves and remained to indicate the wealth originally contained by this tomb. The small pot (52mm. in height, and 60 in diameter) was made of alabaster; it had a globular body, high shoulder, constricted neck, and outturned rim (not illustrated). The outlines of the bowl fragment mentioned above have been reconstructed in Fig. 18; this was made of a piece of beautiful, translucent green serpentine, and had been highly polished. The shape of this vessel is not unlike that of Fig. 26 from Tomb 109, but that tomb had its origin in Stratum X, while the present specimens were found in Tomb 45, attributed to Stratum VIII-B. Plate LII.c shows one of the two fragments of a large stone jar which Tomb 45 also contained. Made of variegated gray-and-white marble, it originally possessed four pierced lug handles (of which two now remain), and a wide, flat shoulder. The other fragment of this vessel was part of its flat base.²⁸

"*Hut Symbols*" (LII.b; CIV, Fig. 23). Only two of these objects were discovered, both in Tomb 31, which had its source in Stratum VIII-C. However, twenty-nine additional specimens have been found in the débris of various Gawra strata, all of which except two (Plate CLVII, Fig. 66, and the specimen published in Volume I, Plate XLIV.c), were made of terra cotta. Almost all "hut symbols," whether made of stone or terra cotta, were discovered in Strata XI-A through IX (cf. Chapter V, p. 171), therefore, the two stone symbols from Tomb 31 apparently represent the latest examples of their type.

The two specimens under consideration were found near the head and hands of the adult within

the tomb (cf. Plate LI.a). Both had been broken at their narrow waists by the collapse of the tomb roof, and both were made of variegated gray-and-white marble. These objects have flat bases, solid bodies, and thin, flat upper extremities in the form of double volutes. In general outline they are closely similar to their terra cotta analogues, but in one detail they differ from all others discovered at Gawra. This detail may best be seen on Plate LII.b, where it will be observed that both objects have faint grooves leading from each volute diagonally to the waist, and in addition, a slight groove extending vertically from the top of each object to its waist. These markings apparently indicate that they were cross-bound by thongs or other materials in these grooves, and that they were consequently employed as loom weights, or as some other type of suspended weight.

It seems hardly likely, however, that such utilitarian objects as loom weights would have been included in the furnishings of any tomb. It is more probable that some other function is to be assigned to them, but the identification of this function is a baffling problem that only future excavations will be able to solve. A full discussion of this problem is entered into in Chapter V (pp. 171-73), to which the reader is referred.

Spheres. Stone spheres, almost invariably of marble or alabaster, were found in Tombs 107, 102, and 110, all of which originated in Stratum X. In addition, Tomb 114 contained six pieces of red jasper, apparently chips from a larger piece, for all were rough and jagged and were not finished pieces, or even natural pebbles. The significance of these jasper chips is unknown, but there seems to be no way to account for their presence in the tomb except as part of the tomb equipment. They lay near the northwest wall (cf. Plate XXVII).

To return to the stone spheres, the largest number contained by any tomb were in Tomb 102, which held twenty-three. These occurred in two groups, the larger of which lay between the elbows of the skeleton and the northeast wall of the chamber, and the other between the feet and the same wall (cf. Plate XXVII). Mixed with these spheres were two conical pieces of alabaster, four natural

²⁸ An alabaster jar was discovered in Tomb B, but no further record of this object has been found. Probably it was in poor condition and discarded in the field.

pebbles of marble, more or less spherical in shape, and a single, roughly conical piece of aragonite. Two sizes of spheres were found in Tomb 102, but their exact numbers are not known. The larger spheres were the same size as those yielded by Tomb 110; the smaller correspond to the size of the spheres found in Tomb 107.

Six spheres were found in each of Tombs 107, and 110. In Tomb 107 these occurred close to the lower chest of its occupant, and were the only objects found (cf. Plate XXVII). In Tomb 110, six of the large-size spheres were uncovered near the skull (*ibid.*); these are unique in that they are the only spheres yielded by any tomb made of a stone not white in color. The variety of stone used in these specimens was a fine-grained marble, having a dark, reddish-brown matrix, and buff veins.

The purposes to which these spheres and related objects were applied is conjectural. Similar objects from stratigraphic debris, in both stone and terra cotta, have been identified as gaming pieces, but it is doubtful whether all the spheres from the tombs may be so described. For example, is it likely that the occupant of any tomb would have had his mortuary equipment limited to six stone spheres, as in Tomb 107, if they were indeed gaming pieces? The occupant of Tomb 107 was, furthermore, a man who possessed a religious standing in the Gawra community, for after his burial a shrine was erected over his tomb (cf. Section A, p. 60). Under such circumstances, a gaming function for the spheres, from this tomb at least, becomes improbable; it is much more likely that they possessed a religious and ritualistic significance, perhaps having been used in divination.

Mace-Heads (Plate CIV, Figs. 21 and 24). With these familiar objects we find ourselves on surer ground. Nine mace-heads were found in tombs; two each in Tombs 110 and 114; one in Tomb 102; and four fragments in Tomb 34. Three of these tombs have been attributed to Stratum X, while Tomb 34 has been found to be of Stratum IX origin. All these mace-heads were made of marble with the exception of one from Tomb 114 (Fig. 21), where black haematite was used. The other mace-head from this tomb was of red-and-

white marble, while all others from the tombs were made of white marble. In outline, all were piriform or barrel-shaped (Fig. 24); the sole exception is again the black haematite specimen from Tomb 114 which is three-sided, with a round, projecting knob on each corner. This object finds its closest parallel in Plate CLXXVII, Fig. 30, found in Stratum XII. For the positions of these mace-heads within the tombs, see Plate XXVII.

"Whetstone" (Plate CIV, Fig. 20). This object, unique in the collections from the tombs, is made of gray slate or shale. It is a small, flat slab with rounded ends, measuring 83 x 20 x 3mm. Around the middle of the object is a gold band, 15mm. wide. Although identified as a whetstone in the field records it may be that it was used instead as a pectoral or other ornament, for its size, as well as the gold band around the middle of the object would have rendered impractical its employment as a whetstone. It was discovered near the right elbow of the occupant of Tomb 114.

Obsidian Blades and Core (Plate CIV, Fig. 22). Six blades of obsidian were discovered as part of tomb equipment, two in Tomb 109, one in Tomb 29, one in Tomb G36-150, and two in Tomb G36-151. Tomb 109 also contained a small obsidian core, 15cm. long. The blade found in Tomb 29 is shown in Fig. 22; it was located near the feet of the child within that tomb. The blades from Tomb 109 are not illustrated; one, however, was a long, thin blade of translucent (almost transparent) obsidian; the other was equally as long and as thin, but of the more common greenish-black variety of this stone. These blades, like the specimen in Tomb 29, were found at the feet of the skeleton (cf. Plate XXVII).

Bone and Ivory
(Plates LIV, CV)

Combs (Plates LIV.a, b, and c, No. 1; CV, Figs. 25-28). The combs discovered in the tombs are without parallel among objects from other Gawra contexts. Six combs were found, one in each of Tombs 109, 110, 34, and 24, and two in Tomb 31. These tombs had their origins in Strata X (Nos. 109 and 110), IX (No. 34), and VIII-C (Nos.

24 and 31), so that they occur in a consecutive sequence of three strata. At least four combs were made of ivory which, to judge by appearance and size, was obtained from boar's tusks (cf. Plate LIV.b, where the enamel is clearly visible). In the remaining two instances (Fig. 26 and Plate LIV.a, No. 2), bone seems a safer designation, but it is possible that here too ivory is the correct description. The comb from Tomb 109 was found, surprisingly enough, at the feet of the skeleton (cf. Plate XXVII), but in Tombs 31 and 24 they lay next to the skull and fingers of their respective occupants. In all other tombs, the locations of the combs has not been recorded.

Two types of combs may be noted. One is distinguished by a high, curved back, and teeth which also form a curve. The backs of the second type are also curved, but to a lesser degree, while the teeth form a straight line. Four examples of the curved type were found (Figs. 25-27=Plate LIV.b and Plate LIV.a, No. 1). This variety is, to judge from our limited evidence, the older, for the combs were discovered in tombs attributed to Strata X, IX, and VIII-C. The two straight combs, on the other hand (Fig. 28=Plate LIV.c, No. 1, and Plate LIV.a, No. 2, were found in only two tombs, both dated to Stratum VIII-C. We may also distinguish between the two types as regards their use, for the curved type was apparently intended to wear as a decoration for the hair; this function would have been impossible for the straight type, which could have been employed only in the care of the hair. Most of the curved combs are large; Plate LIV.a, No. 1 shows the largest, measuring 21cm. in length. Probably Fig. 27 was equally long, for its existing length is now 19.6 cm., with one end missing.

Hairpins (Plates LIV.c, No. 2; CV, Figs. 29-30). In addition to the combs just described, the occupants of Tombs 109, 31, and 24 were also equipped with ivory hairpins or bodkins. The pins from Tombs 109 and 24 were long and pointed at both ends, altogether resembling a porcupine quill, and were elaborately decorated, with numerous lozenge-shaped inlays of lapis lazuli and turquoise in the thick, middle portion. Both pins were reinforced with four gold bands. The pin in Tomb 109 had completely decayed, but the gold bands and pieces

of inlay had remained to furnish proof of its existence.

The pin found in Tomb 31 is of a different type than the foregoing examples. It has a concave, spoon-like head, a zigzag shaft, and a blunt point for insertion in the hair. If these pins of both types were employed as hair ornaments, as is probable, the quill-shaped type was probably so inserted that the inlay appeared above the hair. In the case of the present specimen, however, the zigzag shaft was probably designed to hold the pin securely in the hair, with the bowl-like end appearing above. It is thus possible that this part of the pin originally contained an inlay of some kind, of which no trace was preserved. This pin was found with the comb shown in Fig. 28 (=Plate LIV.c, No. 1) in front of the face of the occupant of Tomb 24.

Spatulas (Plate CV, Figs. 31-34). Fragments of long, spatulate bone objects were found in two tombs, Nos. 114 and 34. The use of these objects is unknown; they may have been employed as table utensils, but may easily have had some totally different function. The spatulate implement illustrated in Fig. 31 was encircled by a band of gold. In the same tomb (No. 114) with this specimen, were the three spatulas shown in Figs. 32-34. The last two, it will be noted, have slight projections at one end, which were apparently bored through, but even this detail gives us little hint as to their precise application. Two fragments of spatulas from Tomb 34 are not illustrated, and were too incomplete to furnish any additional information. They were, however, apparently of the same type as the ones just discussed.

The only remaining bone object from the tombs was a hemispherical bone button, or spindle whorl, found in Tomb 29. This object measured 20mm. in diameter, and 9mm. in height.

Seals

(Plates LIX.c; CVI, Figs. 35-39)

Seals form the most important group of objects, next to pottery, available for verification of the stratigraphic attributions of the tombs made in Section A. Although seals are extremely common in almost all strata of the mound, only six specimens were discovered within the tombs. These seals come

from three tombs attributed to Stratum XI, two of Stratum X origin, and one attributed to Stratum VIII-C.

Figs. 35 (Tomb G36-134) and 36 (Tomb G36-110) show two of the three seals from Stratum XI tombs. The third seal (from Tomb G36-60) is illustrated on Plate LVII.b, where it has been strung on a necklace. Figs. 35 and 36 are small plaques, rectangular in shape; similar plaques have been produced by Strata XII, XI-A, and X-A (cf. Chapter VI, p. 178). Fig. 35 is made of white paste, and was found on the shoulder of the occupant of Tomb G36-134, suggesting that it had been worn around that person's neck by means of a string. Fig. 36 is made of grayish-black steatite.

The comb design of Fig. 35 is an unusual glyptic pattern, having as its closest parallels the designs of Figs. 54 and 55 of Plate CLXI (of which Fig. 55 was discovered in Stratum XI), and the pattern of Plate CLVIII, Fig. 9, from Stratum XIII. The design of Fig. 36 is roughly similar to the designs of Plate CLIX, Fig. 20 (Stratum XI), and Plate CLXII, Fig. 80, right (Stratum XI-A). The hemispherical seal of black steatite strung on the necklace illustrated in Plate LVII.b bears the quartered-circle design which was popular in Strata XII, XI-A, and XI (Plate CLVIII, Figs. 12-15, and Chapter VI, pp. 179-80).

The seals illustrated in Figs. 37 and 38 come from adjoining tombs, Nos. 110 and 114, both of which have been attributed to Stratum X. The position of the seal in Tomb 110 has not been recorded; the seal from Tomb 114, however, was found between the wrists of the skeleton; cf. Plate XXVII. These seals are made of lapis lazuli, an unusual glyptic material at Gawra, for only one specimen made of this variety of stone was uncovered in the excavation of the building levels of the mound, and this was found in unstratified earth (Plate CLXIX, Fig. 167). Fig. 37 bears the figure of a man, advancing left, with arms upraised, but the most interesting detail is the drilling which has been employed to form the outlines of the limbs. Five examples of drilling technique have been discovered in various strata; Plate CLXII, Figs. 74, 75, Plate CLXVII, Figs. 138, 139, and Plate CLXX, Fig. 181. Of these, the closest parallel to the present

seal from Tomb 110 is provided by Fig. 181, where drilled holes also form part of the outlined figure.

Fig. 38 shows the lapis lazuli seal from Tomb 114, which is engraved with the reclining figure of an animal, perhaps a sheep. Fig. 39 (=Plate LIX.c) is an unusual plaque of ivory, rectangular in shape. The size of this plaque (45 x 37 x 9mm.), and the material from which it was fashioned, are features which are unduplicated in the extensive collection of seals recovered from the building levels of Gawra, except for an ivory plaque of even greater size discovered in Stratum VIII.²⁰ As the present specimen was discovered in Tomb 31, attributed to Stratum VIII-C, the analogy just mentioned can only be regarded as confirmation of the tomb's attribution.

In the scenes depicted, however, the two ivory plaques differ widely. The Stratum VIII object showed two opposed ibexes, in a reversible style, each with a vulture perched on its back. The Tomb 31 object, however, represents a (horned?) quadruped, probably a cow or bull; at the rear of the animal is a human figure with one arm upraised. Over the back of the animal is a star. The area between the animal's head and the left edge of the seal is deeply marred, but at least one human figure (larger than that on the right) seems to be represented. The scene presumably shows a worshiper driving a sacrificial animal to a waiting divinity; if this interpretation is correct, the scene would seem to be more closely related to the subject matter of later cylinder seals than to the simple designs of the stamp seals from Stratum VIII and earlier strata. The plaque was found near the left hand, which rested before the face of the adult occupying the tomb (Plate LI.a).

Beads and Pendants

(Plates LV-LVII; CVI-CVII, Figs. 40-52)

Beads. Beads are the most common objects found in tombs, as well as in simple graves. The occupants of thirty-five of the total of fifty tombs which had not been robbed or disturbed, and contained objects of some sort, had been furnished with beads.

Beads were found on all parts of the bodies of

²⁰ TG., 123; Plates LV.a; LVII, Fig. 29.

the persons laid within tombs (cf. Plate XXVII). They occurred, in different tombs, at the skull, neck, hands and wrists, waist, knees, and ankles, indicating that they were worn not only as necklaces, but as adornment for almost every part of the body. In one tomb attributed to Stratum IX (No. G36-34), five groups of beads were found at the head, neck, wrists, and waist of the skeleton, and it was discovered that the beads occurring at the waist had been sewn to cloth in alternate black and white columns in a herring-bone pattern. Traces of the cloth, with the beads still in the position described, were preserved, and undoubtedly were part of a girdle or similar article of clothing. The width of this girdle may be estimated at approximately 8.5 cm.; apparently only the front of it had been decorated with beads, for no beads were found where the garment passed around the sides and back of the skeleton. Beads were found in great numbers at the wrists, arms, waist, and knees of the occupant of the richly furnished Tomb 102. A bead-decorated girdle was also probably worn by this individual, as indicated by the occurrence of beads at his waist, but their arrangement in this instance is uncertain. (cf. Plate XXVII).

The number of beads contained by single tombs ranged from a few dozen to tens of thousands. The largest number of beads found within any one tomb was 25,192 (Tomb 102), which reached a length of 22 metres when strung. The beads from Tomb G36-34, discussed in the preceding paragraph, numbered over 8,500; while Tomb G36-60 contained over 3,000 beads. Tombs 16 and 180 possessed several thousand each, and in Tomb G36-27 were close to 1,500 beads, of which half were cowrie shells.

The beads discovered in tombs were made of a wide variety of materials. Apparently all available types of stone were utilized, and beads of turquoise, jadeite, carnelian, haematite, marble, limestone, quartz, obsidian, steatite, lapis lazuli, and diorite were found, as well as numerous examples of shell beads and cowries. A single ivory bead of rosette shape (Fig. 44) was also discovered, while white paste beads are extremely common. Gold beads were found in Tombs 109, 110, 111 (cist), 114, and 31, but electrum beads were found in Tomb

109 only (Plate LV.a, Nos. 2 and 3).⁵⁰ The most popular materials were, however, white paste, shell, carnelian, obsidian, and turquoise. Lapis lazuli beads occur in substantial numbers in only one tomb, No. 109, which produced over 450 made of this variety of stone. Cowries were found in only four tombs, Nos. G36-27, G36-34, G36-60, and 209; cf. Plates LVII.a, No. 5, LVII.b, and LV.b, No. 3.

As regards shape, most of the beads from the tombs are tiny rings, usually made of shell, limestone, or obsidian (cf. Plates LVII.a, Nos. 3, 4, and 6; LVII.b and LV.b, No. 2). Somewhat larger rings are also common (Plates LV.a, LVI.a, LVII.a, No. 2). These large rings are sometimes beveled, but this treatment is rather unusual (Plate LVI.a, top left). Ball-shaped beads are never found, unless made of gold or electrum (Plates LV.a and LVI.a, No. 2). Cylindrical beads are always of lapis lazuli, shell, or gold (Plates LV.a, Nos. 1 and 4, gold; LV.b, No. 1, shell).

Beads of unique shape are illustrated in Plate LVI.c, Nos. 1 and 2, and Figs. 40-44. The calf's head, Plate LVI.c, No. 1 is reminiscent of the two bull's heads from Strata XVI and XVIII described in Chapter VII, p. 197 (Plate CLXXIV, Figs. 60 and 61), but is of different workmanship, and was used as a bead, not as a pendant, as were the earlier analogues. Made of lapis lazuli, it was found in Tomb C. Of the same material, and also from Tomb C, is no. 2 of the same plate. This is a bead in the shape of a four-pointed star; in outline it is not altogether unlike the knobbed bead, Fig. 40, which was discovered in Tomb 109, although the latter specimen is much more elaborate. Additional beads of lapis lazuli from Tomb 109 are illustrated in Figs. 41-43. Fig. 41 is a button with plain, unengraved base; Fig. 42, a rectangular bead. Fig.

⁵⁰ Mr. A. J. Gausch, of Smith, Rudy & Company, Philadelphia, Pa., has made an analysis of one of the beads from Tomb 109 which confirms the earlier identification of this metal as electrum. The results of his examination are as follows:

Copper	... 56%
Silver	... 61.39
Gold	... 38.05

Cf. the analyses of the later electrum spear-head and donkey from the Royal Cemetery at Ur; *UC.*, p. 294.

43 has a gabled shape not unlike some stamp seals, and bears the faint figure of an animal engraved on one surface. This object may have originally been a stamp seal. Fig. 44 is in the form of a rosette, and is the only bead found at Gawra made of ivory. It was found in Tomb G36-60, which also produced the paste pendant shown in Fig. 45, the beads and seal illustrated in Plate LVII.b, and the pottery jar, Fig. 4.

Pendants. Pendants are not uncommon in the tombs. Possibly the most interesting is the lapis lazuli acorn shown in Plate LVII.c, No. 3, which is a replica of the object from Stratum XI-A illustrated in Plate CLXXIV, Fig. 59. The present specimen was discovered in Tomb C, which has been found to be of Stratum IX date; the stratigraphic sources of these identical pendants or amulets are therefore widely separated.

Fig. 45 (Tomb G36-60) is a vasiform pendant of yellow paste. Plate LVI.a, Nos. 1 and 3 illustrate tanged pendants of light red carnelian from Tomb 31. Two pendants of similar shape and material were found in Tomb 109. Fig. 46 illustrates one of the finest and most delicate examples of the goldsmith's art discovered at Gawra. From Tomb 109, it represents a wasp or winged ant; the head, thorax, and wings are formed of a single, solid piece of gold, but the abdomen is represented by a lapis lazuli bead. The thorax is pierced for suspension. Whether this object was merely a decorative pendant or possessed an amuletic significance is, of course, now uncertain.

Tomb 111, which was connected with Tomb 109, supplied another naturalistic pendant or amulet of gold, Fig. 47. This is in the form of the hoof of a cow or bull, pierced near the top for suspension. It was found with Fig. 48, a spatulate pendant, also of gold, and the gold spiral shown on Plate LVI.b. All three gold objects, together with the beads shown on the same plate, were discovered near the fingers of the person at the lower right of Plate L.a, and apparently formed a wristlet.

A total of ninety pendants of the type illustrated in Fig. 49 were discovered in Tomb 109, from which came the gold and lapis wasp discussed in an earlier paragraph. All were made of gold, and each one has an open, looped body, with a long tang

which is pierced for suspension. These "racquet"-shaped pendants ranged from 11 to 16mm. in length, and from 5 to 7mm. in diameter; they were discovered in one mass at the fingers and wrist of the occupant of Tomb 109, and must have formed a bracelet.

The tanged gold disc illustrated in Fig. 50 was discovered under the head of the occupant of Tomb 25, and was apparently an ear pendant. The only parallel to this object was found in a grave attributed to Stratum VIII which, like Tomb 25, had been sunk near the Western Temple.³¹ The attribution of Tomb 25 to Stratum VIII-C is therefore substantiated not only by its location adjoining the Western Temple, but by the analogy of an identical object contained in a grave of definite Stratum VIII date.

The only copper pendant discovered in the tombs is shown in Fig. 51, and was in Tomb G36-135, of Stratum XI origin. This was made of copper wire, with bifurcated and looped ends, and a suspension loop. Adhering to the suspension loop were traces of cord, by which it was suspended from the neck of the skeleton. No Gawra analogies to this object have yet been found, but somewhat similar pendants, also of copper, were discovered in Stratum II of Tepe Hissar, in Iran.³²

Fig. 52 was found with Fig. 51, the copper pendant, at the neck of the occupant of Tomb G36-135. It is an incomplete obsidian pendant of disc shape, having two suspension holes set closely together at the top of the object. It is identical in all of these characteristics with a specimen found in the Northeast Base area at the foot of the mound, but the two are widely separated in time. Can this pendant from the tomb represent a surface-find by its occupant?

Copper

Only two objects made of copper, other than the copper pendant described above (Fig. 51), accompanied burials within the tombs. Both were awls, square in section and measuring 44 and 45mm. in length and are unillustrated. They were discovered

³¹ T.G., 141; Plate LXXXIV, Fig. 22.

³² M.J., Vol. XXIII, No. 4 (1933), Plate CV.c, Nos. H6 and H509. The latter example is, however, coiled rather than looped.

in Tomb 37, which has been attributed to Stratum VIII-C.

Gold and Electrum

(Plates LVIII, LIX.a and b; CVII-CVIII, Figs. 53-65)

Beads and pendants of gold and electrum have already been described. The "whetstone" with gold band (Plate CIV, Fig. 20); hairpins with gold bands (Plate CV, Fig. 29); and the spatulate object with a gold band (Plate CV, Fig. 31), are all gold-decorated objects that have also been discussed in earlier paragraphs. The remaining gold objects include ornaments of various kinds, such as rosettes and studs, as well as a tubular gold ferrule, and an electrum object in the form of a wolf's head.

Rosettes (Plates LVIII, LIX.a, Nos. 6-9; CVII-CVIII, Figs. 53-58). Seventeen gold rosettes were found in seven tombs attributed to Strata X, IX, VIII-C, and VIII-B. The occupant of Tomb 110 (Stratum X) was furnished with six rosettes, and the occupant of Tomb 109 (Stratum X) with five. Two rosettes were found in Tomb 29 (Stratum VIII-B), but Tombs 114 (Stratum X), 124 (Stratum IX), 46, and 31 (both Stratum VIII-C), on the other hand, each contained only a single rosette.

The rosettes were made by hammering sheets of gold until they were the requisite size. The tips of the petals were then cut into shape, and in some cases the petals outlined to the center. The number of petals varies between eleven and twenty; twelve and sixteen-petaled examples are the most common. In diameter the rosettes range from .018 to .085 centimetres.

The rosettes may be divided into four types. These are: (1) rosettes with pendant ribbons, always four in number; (2) rosettes with conical center insets of stone; (3) rosettes with a conical gold center; and (4) flat rosettes, without ribbons or other features, and usually small in size.

The rosettes with pendant ribbons (Figs. 53 and 54; Plate LVIII.a, Nos. 1 and 3) are the only type lacking the central piercings by means of which most of these ornaments were attached to clothing. This fact may indicate that they were used in a different manner, or adorned a different part of the body, than the rosettes of other types, but how or

where is uncertain. The ribbon-rosette of Tomb 124 was found at the skull of its occupant, but those of Tombs 110 (cf. Plate XXVII) and 29 were found at the feet. The position of the ribbon-rosettes in Tombs 109 and 31 were not noted. The ribbons are sometimes embossed with vertical rows of herring bones as in Figs. 53 (=Plate LVIII.a, No. 3) and 54, but may be plain as in Plate LVIII.a, No. 1. Two ribbon-rosettes had slightly rounded centers (Plate LVIII.a, Nos. 1 and 3), but these were not prominent features.

The rosettes containing conical stone centers number but three and were found in Tombs 110 (2) and 114, both of which have been attributed to Stratum X. One of these had a nipple made of lapis lazuli (Fig. 55=Plate LVIII.b, No. 5); the other (Fig. 58=Plate LVIII.b, No. 4) was made of turquoise. In the third example (Plate LVIII.b, No. 3) the conical inset had been lost. In every case the stone center had been held in position with bitumen. Each rosette of this type had four pierced holes, grouped in opposite pairs around the center, by means of which they were sewn to some article of clothing. In Tomb 114, this rosette lay against the wall of the tomb (cf. Plate XXVII), and some distance from the skull. In Tomb 110, however, the two stone-center rosettes were associated with the skull, and it is probable, therefore, that they decorated a headband or headdress of some kind (Plate XXVII).

The sole example of the third type of rosette is shown in Plate LVIII.a, No. 2. This is the largest rosette found in the tombs, measuring .085cm. in diameter. In this type the extruding cone is not made of stone, but was formed from the same sheet of gold. Like the rosettes with stone centers, this rosette has two pairs of attachment holes at its center. The present specimen was discovered in Tomb 109, attributed to Stratum X. All nipped rosettes, whether possessing stone or gold centers, seem therefore to be an earlier type that did not survive into strata later than X, unlike the ribbon-rosettes which are found in tombs attributable to four successive strata (Strata X through VIII-B), and the flat rosettes, which were discovered in tombs originating in Strata X, VIII-C, and VIII-B. An interesting parallel to the present example is provided by Plate CLXXV,

Fig. 76, which shows a gold rosette with conical gold center and four attachment holes, found in a grave (Locus 181) intrusive into Stratum XI-A. This child's grave also yielded stone spheres similar to those found in the tombs, as well as another gold ornament (Plate CLXXV, Fig. 76). As this grave was situated directly under the Stratum XI Temple it is, in all probability, a sacrificial burial originating in Stratum XI (cf. Chapter III, p. 101). In any case, the rosette discovered in this grave is the earliest example of this kind of gold ornament. The stratigraphic range of the conical-centered rosettes (with both stone and gold centers) would thus include Strata XI through X; in Stratum IX these types are apparently discontinued.

Examples of the last type of rosette are illustrated in Figs. 56 and 57; Plates LVIII.b, Nos. 1 and 2; and LIX.a, Nos. 6-9. Eight of these smaller rosettes were discovered; all are flat, and rather inferior in workmanship to the rosettes of other types, although Nos. 1 and 2 of Plate LVIII.b are carefully shaped and embossed, and their petals painstakingly delineated. Only one of the eight rosettes has attachment holes (Fig. 57, from Tomb 29). The rosettes of this type were discovered in Tombs 110, 109, 46, and 29. These tombs originated in Strata X, VIII-C, and VIII-B, and contained rosettes of other types as well. Most of the eight small, flat rosettes were found under or near the skulls of the tomb occupants.

Studs (Plates LIX.a, Nos. 1-5; CVIII, Figs. 59-63). Ninety-two studs of gold were discovered in Tombs 109, 110, and 31, of which seventy-nine were found in Tomb 109 alone. These studs are of four types. The first is elliptical in shape, and curved, as if to accommodate the curve of some part of the body (perhaps the arms?). The second type has the same shape, but is characterized by an elliptical depression on top to accommodate a stone inlay. The third variety is hemispherical. The fourth and last type is flat and crescent-shaped, and unlike other studs, which were attached to clothing by means of bitumen, these crescents possess two holes each by means of which they were sewn on to various articles of clothing.

Examples of the first type of stud are shown in Fig. 59 and Plate LIX.a, Nos. 1, 3, and 5. Six studs

of this type were discovered in Tomb 109, three of which were smaller than the specimens illustrated. These studs, together with fifty of the hemispherical type and three of the inlaid variety, were found a few centimetres away from the knees of the occupant of Tomb 109, and near the wall of the tomb (cf. Plate XXVII). Probably they had been attached to some article of clothing, perhaps a jacket, which disintegrated without leaving a trace.

The small studs with depressions on top, some of which still contained pieces of lapis lazuli inlay (Fig. 60 and Plate LIX.a, Nos. 2 and 4), were found in Tombs 109 (three) and 110 (two). They are identical in shape with three gold studs from a child's grave in Stratum VIII, located near the Western Temple, but these later specimens have, however, smaller inlay holes.³³

Fifty hemispherical studs of our third type (Fig. 63) were contained by Tomb 109, while Tomb 31 was furnished with eleven. These tombs originated in Strata X and VIII-C respectively, so that we again have another link between these two strata. Another parallel may be found on Plate CLXXXII, Fig. 1, from an adult grave sunk into Stratum XII. This grave was, however, later in date than Stratum XII, perhaps originating in Stratum XI-A, or even XI. The copper bosses or studs from the grave have two holes for attachment, while the gold studs from the tombs were affixed by means of bitumen. Some of the gold studs still contained the original bitumen, and on some of these the imprint of cloth could be plainly seen.

Crescent-shaped studs are illustrated in Figs. 61 and 62. Tomb 109 furnished the only examples of this type of stud, of which two minor varieties may be distinguished. One type is curved, as in Fig. 61; the other has a sharper, almost semicircular, arc, as in Fig. 62. Ten crescents of each kind were found; perhaps they were alternately employed. Each crescent has two small piercings by means of which they were attached.

Tube (Plates LIX.a, No. 10=CVIII, Fig. 64). This object, like most of the studs described under the preceding heading, comes from Tomb 109. It is a gold tube, closed and constricted at one end,

³³ TG., Plate LXXXIV, No. 24, and p. 142 (Grave 12).

and with an open, semicircular projection at the other. It was probably used as a cap or ferrule on a wooden handle of some kind, but since no mace-heads were found in this tomb, it must have been employed on some other kind of handled object, or even on a wand or staff. The semicircular end of this tube may have been made to accommodate a projection, or some other detail of the wooden object to which it was fitted, but the precise nature of the original is still conjectural.

Wolf's Head (Plates LIX.b=CVIII, Fig. 65). This tiny electrum object, measuring only 30mm. in length by 23mm. in height, is the masterpiece of the goldsmith's art at Gawra. Found in Tomb 114 (of Stratum X origin), it lay against the south-eastern wall of the tomb, and about fifteen centimetres from the skull. The neck is hollow and tubular, forming a socket which has two holes through its walls, undoubtedly for the insertion of tacks or dowels. It is, therefore, a terminal for some object, which can only have been rod-shaped, and hence a wand or baton, in this respect it is to

be compared with the gold tube, Fig. 64. To judge from the position of this object within the tomb, this wand may have lain on the arms of the occupant of the tomb; the end of the wand, with its wolf's head terminal, almost touching the wall (cf. Plate XXVII).

The entire head is a single piece of metal with the exception of the ears, the lower jaw, and the teeth. The ears were attached by means of copper pins, long since decomposed into green copper-oxide. The lower jaw was carefully jointed into the rest of the head, and held in position by an electrum pin leading from the roof of the mouth, which passed through the lower jaw, where it was bent back. The eye sockets contain bitumen, which presumably held eyeballs of some kind of stone. The nostrils are indicated by two depressions. The mouth is open, showing the teeth which were made of electrum wire, finely drawn and sharp. The inside of the head was filled with bitumen, which served, together with the socketed neck, and the two pins through the neck, to hold the object in position.

TABLE F

CATALOGUE OF OBJECTS FROM THE TOMBS

<i>Tomb No.</i>	<i>Str. of Origin</i>	<i>In Square</i>	<i>Located or illustrated on Plates</i>	<i>Objects</i>
20	VIII-B	8-M	XXII.	None.
29 (double-burial)	VIII-B	6-Q	XXII, XXVI.	Ribbon-rosette, gold. (G3-199A.) Fig. 54. Rosette, gold. (G3-199B.) Fig. 57. Button, bone. (G3-241.) Not illustrated. Blade, obsidian. (G3-242.) Fig. 22.
45	VIII-B	6, 7-O	XXII, XXIV, XXVI.	Bowl fragment, serpentine. (G3-424.) Fig. 18. Two jar fragments, marble. (G3-425.) Plate LII.c.
A	VIII-C	10-Q	XXII.	Pot, alabaster. (G3-426.) Not illustrated.
B	VIII-C	9-O	XXII.	Beads, stone and shell. (Not registered.) Not illustrated.
2 (cist)	VIII-C	5-K	XXII, XLIX.a.	Jar, alabaster. (Not registered.) Not illustrated.
5	VIII-C	5, 6-J	XXII, XXVI.	Beads, stone and paste. (Not registered.) Not illustrated.
14	VIII-C	10-M	XXII, XXVI.	None.
16	VIII-C	10-M	XXII.	Beads; stone, shell and paste. (G3-91.) Plate LVII.a, No. 1.
18	VIII-C	8-Q	XXII, XXVI, LII.a.	Beads; shell and stone. (G3-132.) Not illustrated.
				None.

TABLE F—(Continued)

<i>Tomb No.</i>	<i>Str. of Origin</i>	<i>In Square</i>	<i>Located or illustrated on Plates</i>	<i>Objects</i>
24 double-tomb (double-burial)	VIII-C	9-O	XXII, XXVI, LI.b.	Comb, ivory. (G3-151.) Fig. 28 = Plate LIV.c, No. 1. Hairpin; ivory, gold, lapis and turquoise. (G3-152.) Fig. 29 = Plate LIV.c, No. 2. Jar, oölitic limestone. (G3-232.) Fig. 11. Pendant, gold. (G3-174.) Fig. 50. Bead, stone. (G3-175.) Not illustrated.
25 double-tomb (double-burial)	VIII-C	9-Q	XXII, XXVI, L.b.	
30 (double-burial)	VIII-C	9 Q-O	XXII, XXVI.	None.
31	VIII-C	9-M	XXII, XXVI, LI.a.	Beads, stone, gold and shell. (G3-282.) Plate LVI.a, Nos. 1, 2, 4-8. Vase, alabaster. (G3-283.) Fig. 17. Hair ornament, ivory. (G3-284.) Fig. 30. Handled bowl, serpentine. (G3-285.) Fig. 19 = Plate LIII.a. Ribbon-rosette, gold. (G3-286.) Not illustrated. Eleven hemispherical studs, gold. (G3-287.) Not illustrated. Bowl, oölitic limestone. (G3-288.) Fig. 16. Seal, rectangular plaque, ivory. (G3-289.) Fig. 39 = Plate LIX.c. Beads, stone, gold and shell. (G3-290.) Plate LVI.a, No. 3. Double-bowl, gray marble. (G3-292.) Fig. 15. "Hut symbol," gray marble. (G3-293.) Fig. 23 = Plate LII.b, No. 1. "Hut symbol," gray marble. (G3-294.) Plate LII.b, No. 2. Comb, bone or ivory. (G3-295.) Plate LIV.a, No. 2. Comb, ivory. (G3-296.) Plate LIV.a, No. 1. Awl, copper. (G3-327.) Not illustrated. Awl, copper. (G3-328.) Not illustrated. Beads; stone, paste and shell. (G3-329.) Not illustrated. Beads; stone, gold, shell. (G3-427.) Not illustrated. Rosette, gold. (G3-423.) Not illustrated. None. Hammer stone. (Not registered.) Not illustrated.
37	VIII-C	10-K	XXII, XXVI.	Three beads, stone. (Not registered.) Not illustrated.
46	VIII-C	8-O	XXII, XXVI.	Beads; stone and paste. (Not registered.) Not illustrated.
57 (cist)	VIII-C	9-Q	XXII.	None.
59 (cist)	VIII-C	9 Q-O	XXII.	None.
60	VIII-C	10-11 M	XXII, XXVI.	
61	VIII-C	11-M	XXII, XXVI.	
64	VIII-C	11-K	XXII.	
65	VIII-C	11-K	XXII.	

EXCAVATIONS AT TEPE GAWRA

TABLE F—(Continued)

<i>Tomb No.</i>	<i>Str. of Origin</i>	<i>In Square</i>	<i>Located or illustrated on Plates</i>	<i>Objects</i>
202 (cist)	VIII-C	6-J	XXII.	Beads; stone, paste and shell. (G5-1280A, B, C.) Not illustrated.
209	VIII-C	6-J	XXII.	Beads; stone, paste and shell. (G5-1298A, B, C.) Plate LV.b, nos. 1-3.
G36-36	VIII-C	7-J	—	Beads; stone. (G6-192.) Not illustrated.
C	IX	7-M	XXII.	Beads and pendant, lapis lazuli. (G3-432.) Plate LVI.c, Nos. 1-3.
D	IX	6-M	XXII.	None.
E	IX	6-O	XXII.	None.
34	IX	7-O	XXII, XXV, XXVI, XLVII.a, XLVIII.b.	Comb, ivory. (G3-380.) Fig. 27 = Plate LIV.b.
				Four mace-head fragments, marble. (G3-390.) Not illustrated.
				Beads; shell and stone. (G3-391.) Not illustrated.
				Two spatula fragments, bone. (G3-392.) Not illustrated.
53	IX	7-O	XXII.	None.
54	IX	7-O	XXII.	None.
62	IX	7-M	XXII, XXVI.	None (robbed).
124	IX	6-M	XXII, XLVII.	Ribbon-rosette, gold. (G4-909.) Not illustrated.
				Bowl, pottery. (G4-996.) Fig. 5.
				One bead, turquoise. (Not registered.) Not illustrated.
169	IX	6 G-J	XXII.	Five spindle whorls, terra cotta. (G5-1360.) Not illustrated.
171	IX	6-J	XXII.	None.
213 (cist)	IX	7-M	XXII, XLIX.b.	Eighteen white paste beads. (G5-1317.) Not illustrated.
G36-34	IX?	7-K	—	Beads; stone, paste, shell and cowries. (G6-193.) Not illustrated.
G36-40	IX	7-Q	—	Beads; white and brown paste. (G6-197.) Not illustrated.
G36-44	IX	7-Q	—	None.
102	X	5-O	XXII, XXVII.	Spouted jar, obsidian. (G4-634.) Fig. 8 = Plate LIII.b.
				Spouted bowl, obsidian. (G4-635.) Fig. 7 = Plate LIII.c.
				Mace-head, marble. (G4-636.) Fig. 24.
				Thirty spheres, cones and pebbles; marble. (G4-637.) Not illustrated.
				Beads, stone. (G4-638.) Plate LVII.a, No. 2.
				Beads; stone and shell. (G4-639.) Not illustrated.
107	X	5, 6-M	XXII, XXIV, XXVII.	Bowl, pottery. (G4-640.) Not illustrated.
108	X	6-K	XXII.	Six spheres; marble. (G4-699.) Not illustrated.
110	X	4 K-M	XXII, XXVII, XLVI.a.	Two beads; stone. (G4-709.) Not illustrated.
				Three rosettes; gold. (G4-765A-C.) Fig. 56 = Plate LIX.a, No. 6.
				Two rosettes; gold, one with turquoise center. (G4-766.) Fig. 58 = Plate LVIII.b, No. 4.

TABLE F—(Continued)

<i>Tomb No.</i>	<i>Str. of Origin</i>	<i>In Square</i>	<i>Located or illustrated on Plates</i>	<i>Objects</i>
109 double- tomb (with No. 111)	X	5-K	XXII, XXVII, XLVI.a.	Ribbon-rosette, gold. (G4-767.) Plate LVIII.a, No. 1.
				Two studs; gold. (G4-768.) Fig. 60.
				Seal, lapis lazuli. (G4-769.) Fig. 37.
				Six spheres, marble. (G4-770.) Not illustrated.
				Two mace-heads, marble. (G4-771.) Not illustrated.
				Beaker, serpentine. (G4-772.) Fig. 14.
				Beaker, serpentine. (G4-773.) Fig. 13 = Plate LIII.e.
				Beads; gold and stone. (G4-774.) Plate LV.a, Nos. 1 and 4.
				Comb, ivory. (G4-775.) Fig. 25.
				Jar, marble. (G4-736.) Fig. 12 = Plate LIII.f.
				Pot, oolitic limestone. (G4-737.) Fig. 9 = Plate LIII.d.
				Bowl, marble. (G4-738.) Fig. 10.
				Rosette, gold. (G4-739.) Plate LVIII.a, No. 2.
				Beads, turquoise. (G4-740.) Not illustrated.
				Ribbon-rosette, gold. (G4-741.) Fig. 53 = Plate LVIII.a, No. 3.
				Two rosettes, gold. (G4-742.) Plate LVIII.b, Nos. 1 and 2.
				Rosette, gold. (G4-743.) Plate LIX.a, No. 9.
				Fifty studs, gold. (G4-744.) Fig. 63.
				Three studs, gold. (G4-745.) Not illustrated.
				Three studs, gold. (G4-746.) Fig. 59 = Plate LIX.a, No. 1.
				Tube, gold. (G4-747.) Fig. 64 = Plate LIX.a, No. 10.
				Twenty studs, gold. (G4-748.) Figs. 61 and 62.
				Three studs, gold and lapis lazuli. (G4-749.) Plate LIX.a, Nos. 2 and 4.
				Ninety pendants, gold. (G4-750.) Fig. 49.
				Beads, gold and electrum. (G4-751.) Plate LV.a, Nos. 2 and 3.
				Beads, lapis lazuli. (G4-752.) Not illustrated.
				Beads, lapis lazuli. (G4-753.) Figs. 40-43.
				Beads, stone. (G4-754.) Not illustrated.
				Beads; stone and electrum. (G4-755.) Not illustrated.
				Beads; stone, gold and electrum. (G4-756.) Not illustrated.
				Two blades, obsidian. (G4-757.) Not illustrated.
				Object, pottery. (G4-758.) Not illustrated.
				Pendant, gold and lapis lazuli. (G4-759.) Fig. 46.
				Core, obsidian. (G4-760.) Not illustrated.
				Comb, ivory or bone. (G4-761.) Fig. 26.

TABLE F—(Continued)

<i>Tomb No.</i>	<i>Str. of Origin</i>	<i>In Square</i>	<i>Located or illustrated on Plates</i>	<i>Objects</i>
				Beads, shell. (G4-762.) Not illustrated.
				Hairpin, bone or ivory, gold, lapis and turquoise. (Not registered.) Not illustrated.
111 double-tomb (with No. 109) (triple-burial)	X	5-M	XXII, XLVI.a, L.a.	Beads and pendants; gold and stone. (G4-794.) Figs. 47 and 48 = Plate LVI.b.
				Jar, pottery. (G4-802.) Fig. 6.
114	X	4 K-M	XXII, XXVII, XLVI.a, XLVIII.a.	Wolf's head, electrum. (G4-821.) Fig. 65 = Plate LIX.b.
				"Whetstone" with gold band. (G4-822.) Fig. 20.
				Mace-head, haematite. (G4-823.) Fig. 21.
				Mace-head, marble. (G4-824.) Not illustrated.
				Six pebbles, red jasper. (G4-825.) Not illustrated.
				Spatula; bone with gold band. (G4-826.) Fig. 31.
				Three spatulas; bone. (G4-827.) Figs. 32-34.
				Beads, gold and stone. (G4-828.) Not illustrated.
				Beads, gold and stone. (G4-829.) Not illustrated.
				Rosette; gold with lapis lazuli center. (G4- 830.) Fig. 55 = Plate LVIII.b, No. 5.
				Seal, lapis lazuli. (G4-831.) Fig. 38.
				Beads; gold, shell and stone. (G4-832.) Not illustrated.
G36-14	X	8-Q	—	None.
G36-26 (cist)	X	8-O	—	One bead. (Not registered.) Not illustrated.
7-9	X	9-M	XXII.	Four paste beads. (Not registered.) Not illustrated.
226	X-A	6-M	XXII.	Beads, stone and paste. (G5-1504.) Plate LVII.a, No. 4.
249	X-A	7-M	XXII.	None.
G36-27	X-A	8-Q	—	Beads, cowries. (G6-148.) Plate LVII.a, No. 5.
				Beads; paste and stone. (G6-147.) Plate LVII.a, No. 3.
G36-30	X-A	8-O	—	None.
180	XI	4-J	XXIII, XLVI.b.	Beads; shell and stone. (G5-1440.) Plate LVII.a, No. 6.
G36-32	XI	4-J	XXIII.	None.
G36-42	XI	5-J	XXIII.	None.
G36-43	XI	5-J	XXIII.	None.
G36-46	XI	5-J	XXIII.	None.
G36-48 (cist)	XI	5-J	XXIII.	None.
G36-60	XI	5-M	XXIII.	Jar, pottery. (G6-258.) Fig. 4.
				Beads and pendant; paste, stone, shell, ivory. (G6-330.) Figs. 44 and 45.
G36-68	XI	5-M	XXIII.	Bowl, pottery. (G6-267.) Not illustrated.

TABLE F—(Continued)

<i>Tomb No.</i>	<i>Str. of Origin</i>	<i>In Square</i>	<i>Located or illustrated on Plates</i>	<i>Objects</i>
G36-74	XI	5-K	XXIII.	None.
G36-86 (semi-circular) .	XI	4-J	XXIII.	None.
G36-90	XI	5-K	XXIII.	None.
G36-95	XI	5-J	XXIII.	None.
G36-100	XI	4-K	XXIII.	Beads, paste. (Not registered.) Not illustrated.
G36-104(elliptical) . . .	XI	3 K-M	XXIII.	Pot, black painted pottery. (G6-281.) Fig. 1. Bowl, burnished pottery. (G6-284.) Fig. 2.
G36-105	XI	5-J	XXIII.	Bowl, pottery. (Not registered.) Not illustrated.
G36-110(semi-circular) .	XI	3-K	XXIII.	Seal, rectangular plaque, steatite. (G6-297.) Fig. 36.
G36-111	XI	5-J	XXIII, XXVII.	Bowl, pottery. (No field number.) Not illustrated.
G36-120	XI	5-J	XXIII.	None.
G36-122(semi-circular) (triple-burial) . .	XI	5-J	XXIII.	None.
G36-134	XI	4-J	XXIII.	Seal, rectangular plaque, white paste. (G6-363.) Fig. 35.
G36-135	XI	5-G	XXIII.	Pendant, copper. (G6-376.) Fig. 51. Pendant, obsidian. (G6-377.) Fig. 52. Pot, pottery. (Not registered.) Not illustrated.
G36-137	XI	6-G	XXIII.	Beads, paste. (Not registered.) Not illustrated.
G36-144	XI	6-J	XXIII.	Beads, white paste. (G6-370.) Not illustrated.
G36-146	XI	4-G	XXIII.	Bowl, pottery. (G6-620.) Not illustrated.
G36-150	XI-A	6-O	XXIII.	Bowl, pottery. (G6-413.) Fig. 3. Pot, slip painted pottery. (G6-414.) Not illustrated. Blade, obsidian. (Not registered.) Not illustrated.
G36-151	XI-A	5-M	XXIII.	Two blades, obsidian. (Not registered.) Not illustrated.
G36-155	XI-A	5-Q	XXIII.	Bowl, pottery. (Not registered.) Not illustrated.

III. GRAVES

(PLATES LX-LXVI)

The mound of Gawra was used as burial ground throughout a major part of its inhabited history. Graves contemporaneous with all strata from VIII through XVIII have been discovered in the debris forming the mound, and there is no reason to doubt the existence of earlier graves in still lower, unexcavated, strata. Over four hundred graves have been uncovered in the excavation of Strata IX through XIX, including a very few in the unstratified area at the foot of the mound designated as Area A, but not including the burials in the Well of Area A, which have already been described in Chapter I. When the eighty tombs considered in the preceding chapter are added to this figure, the importance of the mound as a necropolis is correspondingly increased, but that it was not the only Gawra cemetery is strongly indicated by various aspects of the evidence furnished by the graves. This evidence will be reviewed later in this chapter (pp. 121-22).

As in the case of the tombs, the purely descriptive account of the graves has been divided into four main sections. Section A deals with the stratigraphic origins and distribution of the graves; Section B with the various types of graves; Section C describes the physical remains and burial customs; and Section D contains a general review of the objects with which the graves were furnished. In the present chapter, however, a fifth section (Section E) has been added, containing some conclusions resulting from a study of various aspects of the graves. In accordance with this outline our first topic is the origins and distribution of the graves in all strata of Gawra investigated to date.

A. STRATIGRAPHIC ORIGINS AND DISTRIBUTION

The graves discovered on the mound have been grouped according to their stratigraphic sources in the following discussion. In most cases it has been possible to determine the stratigraphic origins of the given graves by an examination of their horizontal distribution, for—with some exceptions—the

locations of the graves of almost all levels are usually found concentrated around the locations of temples or important private dwellings of overlying strata, and hence must be related to those strata. In this characteristic the graves duplicate a feature of the tombs, but while the tombs were almost exclusively associated with religious edifices, graves are often situated around or underneath buildings of whose secularity there can be no doubt. Another important consideration affecting the problem of determining the sources of the graves is the fact that they, unlike the tombs, required no deep shafts, for no high walls were erected to enclose the burial, and there was no hollow enclosure to cover securely with earth as a means of protection from robbery. As a consequence, it is not necessary to trace the location of each grave back to a likely stratigraphic source, for in an overwhelming number of instances the graves lie not far below the stratum in which they originated. The determination of the stratigraphic origins of the graves is simplified, moreover, by their occurrence in fairly large numbers, so that a detailed analysis of all possible stratigraphic sources of each grave, such as was undertaken for each tomb, is now neither feasible nor necessary.¹

Turning now to an examination of the source and distribution of specific graves, we begin with the burials excavated from Stratum VIII.

Stratum VIII Graves. Thirteen graves contemporaneous with Stratum VIII were found below that stratum and in Stratum IX. They occurred at elevations ranging from 11.35 to 12.03m. above the datum. Seven of these graves were grouped around the location of the Western Temple of Stratum VIII-C, being situated in Squares 9 and 10-Q, 9 and 10-O, and in 10-K and 10-M. None of them was situated directly below this Temple of Stratum VIII-C, so they cannot be described as containing sacrificial victims; nevertheless all were occupied by infants. In addition to these seven

¹ Cf. however, Section D of the present chapter, pp. 116-17.

graves, a second group of seven child burials around the Western Temple had been discovered in the second season of excavations which have already been published in Volume I of the present series.² Those graves occurred south and west of the Western Temple so that, except for the front of the building, the Temple may be described as having been almost completely encircled by a burying ground for infants. Furthermore, when it is remembered that seventeen tombs were also closely associated with the Western Temple (Plate XXII), the religious importance and the adducent power over burials possessed by that edifice is even more apparent, for it caused the creation of a cemetery composed of thirty-one graves and tombs closely surrounding it. In this respect, the Western Temple of Stratum VIII-C was surpassed only by the Temple of Stratum XI.

Four graves were located just below the Eastern Temple of Stratum VIII, which must have been excavated from within that building. These have been described in Volume I;³ it remains only to point out that they, like Tombs 2, 202, and 5 under the same building, were plainly sacrificial in character, and to observe that although cemeteries of infants are thus associated with both the Western and Eastern Temples of Stratum VIII, the one surrounding the Western Temple was by far the larger.

The two Stratum VIII graves not yet described are isolated burials in Squares 10-S and 7-M respectively; both lay in Stratum IX. The grave in 10-S, on the edge of the mound, contained an infant; that in Square 7-M was a disturbed grave of two adults.

Stratum IX Graves. Twenty-four graves were dug from Stratum IX into the underlying stratum of X, and into débris below X. These graves, which occur at elevations of 10.27 to 11.37m., may be divided into four groups. The first is formed of four graves in Squares 7-Q and 8-O, one of the two graves in the latter square lying close to the southeastern wall of Room 903-A of the Temple. It is thus a sacrificial burial originating in the Temple, where it occupied a position almost directly

opposite Tomb C, on the other side of the central chamber (cf. Plate XXII). This grave (Locus 47), which lay 1.30m. below the floor of the Temple, contained an infant wearing a gold headband and a necklace of gold, carnelian, and lapis beads. It was covered with stone slabs, and is the only grave at Gawra to have had this covering. The second grave in Square 8-O (Locus 52), an urn burial of an infant, lay about two metres northwest of Room 904, and is undoubtedly related to the Temple. These two graves in Square 8-O, however, are the only ones definitely associated with that edifice.

The second group is situated in Squares 9-O, 10-O, and 10-M, and is formed of six graves. All, except the single burial of Square 10-M, occurred in the large open area enclosed by Rooms 905-907 and 910-917, although the reason for locating them here, instead of closer to the temple, is not clear. As this area in Stratum VIII-C was occupied by part of the Western Temple, it might be presumed that the burials under discussion should be connected with that structure of VIII-C rather than with Stratum IX. However, since they lay in Stratum X débris rather than in IX, as do the graves definitely attributable to the Western Temple, their greater depth points strongly to a source in Stratum IX. Certainly there is no apparent reason for excavating such deep shafts, for all the present graves were unfurnished burials of children.

The third group comprises only two graves, both located in Square 10-J, on the southern edge of the mound. The fourth and last group is the largest, being formed of twelve graves lying in Squares 6-J, 7-J, and 6-G on the eastern edge of the mound. The location of so many graves in this eastern sector is puzzling, for ample space was available in the sparsely occupied settlement of IX for closer association with the Temple. Nor can the overlying Eastern Temple of Stratum VIII be held responsible for the location of this group of burials. These graves occur at elevations of 10.89 to 11.37m., two metres or more below the floors of that building, and thus cannot be related to it. A further complication is the fact that many contemporaneous tombs were located in the completely unoccupied area to the rear of the IX Temple,

² Pp. 141-42.

³ Pp. 142-43 and Plate XII, inset.

so that some definite reason must have existed for the separation of the locations of tombs and graves in Stratum IX, and for the concentration of a large number of IX graves on the eastern edge of the mound. This problem will be discussed in detail in Section E of the present chapter.

Stratum X Graves. Like the graves of the succeeding stratum, only a few graves originating in Stratum X were associated with the Temple of that level. A total of twenty-three had been dug from the floors of Stratum X into Stratum X-A, or just below; almost all of these occur at elevations of 9.83 to 11.17m. Of these graves, one containing an infant (Locus 220) was found about 75cm. below the floor of Room 1074, the central chamber of the Stratum X Temple, and is thus of a sacrificial character. Another (Locus G36-27) was situated directly in front of the same building, while a third (Locus 201) was discovered below the floor of Room 1080, to the northeast. Whether this grave may be regarded as having been associated with the Temple is doubtful, however.

The remaining twenty graves have no connection with the Temple, and were found in two groups, of which the first is composed of five graves located in Squares 5-J and 6-G on the eastern edge of the mound. These burials are situated almost directly under the group of twelve graves of Stratum IX described above, and it would thus seem that this eastern area of the mound was a burial ground of limited popularity for some period of time. The last group was found in Squares 8-Q, 7-Q, 8-O, and 7-O, where they were distributed among the compact series of rooms occupying that area. Three of these, in Square 7-O, were located outside Room 1010, one of the largest rooms in the Stratum X community and the central room of an extensive group. No graves were associated with the Shrine, Room 1003, which had been erected over Tomb 107, and next to which Tomb 102 was situated (cf. Chapter II, p. 60).

Stratum X-A Graves. As this stratum lacked a temple or other important public building to serve as an attraction for contemporaneous burials, the widely scattered distribution of its graves is hardly surprising. The absence of a religious edifice in Stratum X-A was a factor of special importance in

regard to the tombs, for it is undoubtedly due to this circumstance that only four tombs were located on the mound during the period represented by this stratum. The same factor did not, however, discourage the use of the mound as a cemetery so far as graves are concerned, for nineteen of them (ranging from 9.68 to 10.57m. in elevation) were excavated from the floors of Stratum X-A into the debris of Stratum XI. This number, in view of the reduced size of the settlement, may be regarded as comparable to, if it is not indeed proportionally larger than, the twenty-three graves representing the more extensive occupation of Stratum X.

Three of the present nineteen graves were discovered in the trench excavated from Squares 8-M and 9-M to the southwestern edge of the mound, and were situated in Squares 8-M and 9-M, where they were dissociated from any buildings of the level. The remaining sixteen, as has been mentioned, were widely dispersed throughout the settlement. Four were in the open ground immediately north of the walls in Squares 5-M and 6-M. Five others were situated in similar unoccupied areas to the east, in Squares 5-K, 5-J, and 6-J. Two occurred in Square 7-K, apparently being related to the small dwellings in that square. Two more had been sunk from Area 15 of the Stratum X settlement, from a point close to Room 24. A single grave was discovered in Square 8-O, at the northwestern limits of the area designated as No. 55. The most interesting group, if it may be described as such, is composed of two graves (Loci 229 and 242) lying in the northern quarter of Square 7-M. Their location here would have little significance, if it were not for the fact that two of the four tombs attributed to this stratum (Nos. 226 and 249) were also discovered in the same sector (cf. Plate XXII). All four burials are apparently associated with Rooms 20 and 21 of Stratum X-A, with Locus 229 being situated in the center of Room 20, and Locus 242 in the southern corner of Room 21. It is difficult to understand why graves and tombs should have been excavated within the narrow confines of these rooms when so much open ground existed in the X-A settlement. It is possible, of course, that Rooms 20 and 21 were used, in the absence of a formal temple, for the

performance of religious rites, and that some measure of sanctity was therefore attached to the building. However, no evidence of any other kind is available to substantiate such a theory, and we are thus left without any satisfactory explanation to account for the phenomenon.

Stratum XI Graves (Plates LX, LXV.b, LXVI.a). Stratum XI is represented by no less than seventy-three graves which had been dug into debris below XI, into Stratum XI-A, and in eight instances (all under or near the Stratum XI Temple) just below XI-A floors. These graves occur at 8.30 to 9.59m. elevations. The sharply increased number of graves in Stratum XI is undoubtedly due to the existence of a temple which attracted considerable numbers of burials to its precincts. In the preceding chapter it was learned that twenty-four tombs originating in Stratum XI were situated near the temple or within it (cf. Plate XXII); this number may now be considerably enlarged by the addition of thirty graves, similarly distributed in and around that building. The Stratum XI Temple, therefore, was the nucleus of a cemetery whose size exceeded even the cemetery surrounding the Western Temple of Stratum VIII-C. The fifty-four burials ringing the location of the Stratum XI Temple are especially remarkable when it is remembered that this building was not in use during the whole period represented by the secular constructions of the same level. There is ample evidence, reviewed in Chapter II (p. 66), to indicate that the temple was abandoned well before the end of Stratum XI; had it survived through the final phase of that stratum there is every reason to suppose that even more burials would have been associated with it.

Of the thirty graves associated with the Stratum XI Temple, twenty-two had been dug outside its walls in Squares 3-J, 4-J, and 5-J, and in identically numbered K squares. No graves were located east of the temple, but nine lay to its rear; an additional nine were situated west and northwest; while four had been excavated within the *livân*. Eight graves had been dug through the floors of the temple, in addition to three tombs which have been described in Chapter II (cf. Plate XXIII). These graves lay below every room of the temple, with two of

them being related to Room 1; one to Room 2; one to Room 3; one to Room 4; and two to Room 5. The eighth grave (Locus 239) was discovered underneath the northern corner of the building. All contained the remains of infants or children, excepting one under Room 1 (Locus G36-81) which was occupied by an adult, so that they are, in all likelihood, the remains of sacrificial victims. Of these sacrificial graves, the most interesting is Locus 181 (Plate LX.b), which was located under the central chamber (Room 4) of the temple, between the west corner of the podium and the wall separating the central chamber from Room 5. This grave was a simple inhumation of a child, and the importance of this interment is disclosed not only by its central position within the temple, but also by the objects accompanying it, which will be described in Section D of this chapter.

The thirty graves encompassing the location of the temple do not, however, constitute the only important group of burials of Stratum XI. A second group comprising nineteen graves was discovered, chiefly in Squares 4-Q, 5-Q, and 6-Q, where they are grouped around and beneath the thick-walled building on the northern edge of the mound. The fact that this edifice formed the nucleus of a large group of graves would appear to support the view that it possessed a religious significance, but is not conclusive proof, for in Stratum XI-A we have a similar concentration of graves below a building which is unquestionably secular in character, not to mention the much smaller group of burials below Rooms 20 and 21 of Stratum X-A, just discussed. Only one of the nineteen graves associated with the present building is located west of it; three lay to the south, while six were at the east, and another (a double grave, Locus 188) lay to the north. Those graves at the west, east, and north had been excavated from points close to the walls of the building, but the three graves to the south were from 2.50 to 3.50m. away. No burials were discovered in the area north of this structure. Eight graves had been sunk within the building, including two each from Rooms 62, 63, and 58, and one each from Rooms 61 and 59. Sixteen of the nineteen graves were occupied by infants. The remaining three contained adults, of whom one was senile.

The third main group of graves of Stratum XI origin comprises those burials lying between the northern group just described, and the group at the east around the Stratum XI Temple. These graves, seventeen in number, form no sharply delimited concentration as did our previous groups, and are merely scattered throughout the compact mass of dwellings located in Squares 5-M and 6-M, and in the southeastern part of Square 5-O. They are thus "house burials" unrelated to any public building, and there is little to learn from a study of their distribution. Almost all were interments of infants, whose bodies were undoubtedly placed under the floors and walls of their homes for superstitious or magical reasons.

In addition, three graves occurred on the periphery of the Stratum XI community (Squares 7-Q, 7-O, and 3-O), which have no connections with any one of the three groups just described, and no relationships with each other. Also to be mentioned are four graves uncovered by the sounding trench in Squares 9-M, 10-M, and 11-M. Two of these were occupied by adults, and two by infants.

Stratum XI-A Graves (Plates LXV.a, LXVI.b). The forty-seven graves contemporaneous with Stratum XI-A, all of which had been dug into the underlying stratum of XII, are as gratifyingly responsive to attempts to relate them to specific structures as have been those of Stratum XI. The graves of Stratum XI-A origin were discovered at elevations from 7.27 to 8.10m., and four main groups may be distinguished. The first is formed of twenty graves occupying the northern sector of the mound, where they are loosely collected around the northern part of the ruined temple (Rooms 75-78), as well as in a wider area farther north. In the period of Stratum XI-A the contour of the mound apparently possessed a northward extension, possibly including most of Squares 4-S and 5-S, for three of the present group of graves were discovered in the side of the mound at the level of XII in those squares. Five more were located in Square 4-Q, most of these having been excavated from Area 71. These graves, although not close to the temple, are undoubtedly to be connected with it, for they are separated from the building only by the L-shaped wall dividing Areas 71 and

74. Five graves occur northwest of the temple and close to its walls, while one (Locus 194) was dug from the floor of Room 75, and thus must have contained a human sacrifice. Two more interments had been made from the floor of the cella (Room 76); one at the southern corner (Locus 268), and another (Locus G36-19) at the eastern corner. It should be noted that both graves found beneath the central chamber contained adult remains, for the interments connected with later temples almost invariably consist of infants and children, as did Locus 194 in Room 75 of the present structure. The remaining graves connected with the XI-A Temple number four; these lay immediately north of the temple, as well as in Area 74, which includes the porch or court of the building. No graves were situated to the west, south, or east, the cemetery of this temple apparently being restricted to little-used, marginal areas of the settlement.

The second group of graves, seventeen in number, was discovered below the large, shapeless building composed of Rooms 89-91 and 97-104, lying next to the Round House in Squares 5-M and 6-M. All except one contained the remains of infants or children, the exception being that of a young adult. Only three of the seventeen graves had been excavated outside this building, one in Room 94, one in Area 92, and the last midway between Room 89 and the Round House. The remaining fourteen burials were found underneath the northwestern half of the building, below Rooms 89-91 and 97-101. The concentration of these burials in this building is difficult to account for, in that no evidence exists which would hint at its public or religious character. It can only be imagined that this house was the home of a wealthy or influential member of the XI-A community who possessed a large and prolific *harim*, but even such speculation does not account for the concentration of these burials under a private house when the temple cemetery was located not many metres to the north. Or had this temple already been ruined?

Five graves in Squares 3-O and 3-M comprise the third group of Stratum XI-A graves. The location of these burials has no special significance, for they occurred in an open area on the northeastern fringe of the settlement, close to the edge

of the mound. All were situated northwest and west of Rooms 51, 54, and 53. The remaining group of graves of XI-A date were discovered in Squares 8-M, 9-M, and 11-M, where this section of the mound was investigated in the present level by means of the sounding trench. Two of the five graves in this sector were in an uninhabited area in Squares 9-M and 11-M, while two more, in Square 8-M, had been sunk beneath the floor of Room 125. The remaining grave (Locus 7-30, Plate LXVI.b), an unfurnished adult burial, lay underneath the western part of Room I of the Round House, close to the entrance of that unique structure, and is the only grave which can be associated with it.

Stratum XII Graves. The cemetery of Stratum XII was the largest of all those on the mound. One hundred and twenty graves were uncovered which were contemporaneous with this stratum, most of their occupants having been buried just under the floors and walls of XII, although three were discovered in Stratum XII-A, and thirteen as deep as Stratum XIII. Thus we have an extreme range in elevations of Stratum XII graves of 6.57 to 7.94m. The deepest burials, however, seem to have been a feature of the White Room, for ten of the thirteen intrusive into Stratum XIII were located in Squares 4-O and 4-Q where they are thus associated with the White Room and those rooms lying northwest of it. Fifteen additional graves, of the more common variety found directly below Stratum XII floors, had been excavated from the White Room complex, most of them from within that building, although four occurred outside, and at the rear, lying between the White Room and the edge of the mound. The graves excavated from within the compound are restricted to Rooms 42-49. A single grave, however, was uncovered underneath Room 38, and one below Room 19, but these are the only burials connected with the southern and southeastern portions of the building.

The remaining eighty-five graves originating in Stratum XII were widely scattered throughout that level. No groups or concentrations are evident, although there seems to have been a slightly larger number of graves in Squares 4-K and 4-J than in

surrounding areas, perhaps because of the location there of the smaller replica of the White Room, Room 26, as well as Room 28. Very few graves were found in Squares 6-G, 6-J, 6-K, 6-M, and 6-O, towards the middle of the mound, almost all burials occurring in squares numbered 3, 4, or 5. The location of the curved street running north from Square 6-O cuts a swath through the distribution of the XII graves for, naturally enough, none are located under that street, although numerous burials occur in the rooms lining both sides of the passage. The northwestern area of the XII settlement, separated from the White Room complex by the street just mentioned, contained fewer burials than the rest of the stratum, only sixteen graves occupying this sector. Also to be mentioned are two graves of Stratum XII origin discovered within the sounding trench in Square 11-M.⁴

The widely dispersed interments contemporaneous with Stratum XII thus form a sharp contrast to the tightly bunched grave locations of Strata XI-A and XI. Nor can the absence of a dominant central building be held responsible, for the White Room or even its smaller counterpart, Room 26, in any other stratum probably would have served as the nucleus of a cemetery in the same manner as the Stratum XI Temple, and the Temple of Stratum XI-A. It is more probable that we have here a shift in religious thought and practice, by which infants were buried under floors and walls of dwellings (presumably the same ones in which they were born) chiefly for superstitious reasons. Whether such acts were intended to be propitiatory, or calculated to bring good luck or even continued fertility to the households with which they were connected is, of course, impossible to determine now. It is probable, however, that some such primitive reasoning accounts for the close association of infants' and children's graves with the private dwellings of Stratum XII. How many occupants of the present burials are to be re-

⁴ Eight urn burials were discovered on the southwestern edge of the mound, in Square 12-M, in Stratum XIII debris during the second season of excavation. These are undoubtedly of Stratum XII origin, for the pottery found with them includes such typical XII features as ring bases and U-shaped pots. Cf. *TG.*, 140-41, and Plate LXII, Nos. 9, 17-19.

garded as sacrificial victims is a question for which there is no positive answer. Yet, while we may assume with some degree of assurance that the interments below the floors and walls of the temples of various levels represent sacrifices, we cannot regard burials under secular buildings in the same light. Almost all of the present Stratum XII burials must, therefore, reflect the high infant mortality rate which must have been characteristic of prehistoric times, rather than represent the victims of a deity requiring human sacrifice (cf. Section E). To be sure, some evidence of infanticide exists; for example, Locus G36-53, a grave in Square 5-K, contained only the skull of an infant which had been enclosed by mud-bricks, but such indications are rare. To repeat, it is likely that the burials of Stratum XII, by their associations with private dwellings, represent some practice unconnected with sacrifice; however, why they should have been so common in XII as compared to other strata is unknown.

No graves have been attributed to Stratum XII-A because of the difficulty of relating burial locations to the scanty building remains of that level. It is possible, however, that a very few of the deeper burials ascribed to Stratum XII (viz., those in XIII) may have originated instead in Stratum XII-A.

Stratum XIII Graves. In view of the acropolis distinguishing this stratum, it might have been expected that a large number of burials were related to its three temples, similar to the cemeteries surrounding the Strata XI-A, XI, and VIII Temples. It is somewhat surprising, therefore, to find that only nine graves originated in Stratum XIII. Six of these burials lay not far below the floor level of XIII, the remaining three having been excavated into débris of the immediately underlying stratum of XV. Their height above the datum is comparatively uniform, these graves being distributed between 5.06 and 5.58m.

Although the paucity of graves contemporaneous with Stratum XIII necessarily limits the conclusions which may be drawn from a study of their distribution, it is nevertheless significant that seven of the nine graves were situated either below the Eastern Shrine, or south of the extant walls of that edifice. This circumstance will be discussed in the

final section of this chapter. The first of these graves (Locus G36-162) was in Square 5-J, b, at or under the western corner of the Eastern Shrine. The second (Locus G36-152) lay directly under Room 2 of the same edifice, while a third (Locus G36-157) was just outside the southern wall of the same room. Not far to the southeast of this grave, but in Square 4-G, b, was another (Locus G36-161), while Square 5-G, b and d, contained two more (Loci 7-6 and G36-153). The last grave associated with the Eastern Shrine (Locus G36-165) was located in Square 5-E, c, just beyond the present contour of the mound. As it is almost certain that the Eastern Shrine originally extended much farther to the south, occupying part of Squares 4-G and 5-G, it is probable that at least three of the five graves which we are now compelled to describe as lying south of that edifice were instead actually enclosed by it. A minimum of five graves had in all probability, therefore, been excavated within the temple itself, and are thus sacrificial in character, with two more graves lying outside the building, but close to its southern wall. All contained the remains of infants or children.

One of the two remaining graves (Locus 7-3) was associated with the Northern Temple. It lay in the western corner of Square 4-M, only a metre away from the niche in the northern wall of the Temple. The only other Stratum XIII burial (Locus G36-148) was in 4-O, c, nearly ten metres north of the Northern Temple, and was unrelated to any structure, besides being rifled. This was, however, of a unique type, being plaster lined.

Stratum XIV Graves. The sparse building remains of Stratum XIV were represented by a mere four graves intrusive into débris below Stratum XV. These have the narrowest range in elevation of graves from any stratum, occurring at 4.55 to 4.66m. above the datum. Three of these, all containing infants, were found below the floors of Rooms 11 and 13 of the single Stratum XIV building. The fourth grave was occupied by an adult, and was situated close to the edge of the tepe, near the southern corner of Square 4-G.

Stratum XV Graves (Plate LXI.a). Ten graves, whose shafts intruded into Stratum XVII at elevations of 3.70 to 4.41m. above the datum, form

the necropolis of Stratum XV, and possibly of Stratum XV-A as well. All were located on the eastern edge of the mound in Squares 3-K, 3-J, 4-J, and 5-G. Six of them occurred well to the east of the large building in Squares 4-K and 5-K, and were probably not connected with that structure. Another had been dug from the middle of Area 12, southwest of and nearer to the same building. The three remaining graves were closely associated with the small, symmetrically shaped building formed by Rooms 3-9. Two of these three graves (Loci 7-25 and 7-49) had been dug in the western end of the central room (No. 6) of this building, while the third (Locus 7-24) lay outside and next to the eastern wall of the same room. These graves contained a young adult, a child, and an infant, respectively.

Stratum XVI Graves (Plate LXI.b). The seven burials originating in Stratum XVI were discovered below the Stratum XVII floor level at elevations of 3.43 to 3.68m. Five of the seven were located in Square 3-J, with three of these lying east of Area 32 and Room 30, close to the eastern edge of the mound. An infant (Locus 7-38) had been buried from within Room 30, while a child (Locus 7-41) lay below Room 29 of the same house. The remaining graves occurred in Squares 4-G and 5-G, one of these (Locus 7-47) was in Area 20, and another (Locus 7-37) lay in the entrance to Room 22. No graves were associated with the frescoed building in Squares 6-E and 6-G, or with the large building in Squares 4-Q and 4-O.

Stratum XVII Graves (Plates LXII, LXIII, LXIV.a). Distinguishing the settlement of Stratum XVII was the largest cemetery contemporaneous with any stratum earlier than XII. Thirty interments had been made from the floors of XVII into the underlying stratum, and into débris just below XVIII; a surprisingly large number when it is considered that all occurred within the limits of the sounding.⁵ All lay from 1.90 to 3.07m. above the datum.

⁵ The area comprising Squares 3-0 and 4-0, in which a compact complex of rooms was uncovered in Stratum XVII, was not excavated in Strata XVIII or XIX so that it is not known if any burials were associated with that part of the XVII settlement.

The association of many of these graves with the tholoi of the present stratum is a significant feature. Two burials (Loci 7-40 and 7-75) lay under the Southern Tholos, while three (Loci 7-55, 7-77, and 7-78) had been excavated within its northern counterpart. The graves within the Southern Tholos contained an adult and infant, and lay below the centre of that structure. Two infants and a child had been buried below the floor of the Northern Tholos. One of these burials was situated close to the second interior "buttress" (counting these in a clockwise direction from the entrance); another was between the fourth and fifth buttresses, although a metre away from them towards the centre of the building; and the third occupied a position exactly under the narrow passage leading into the tholos. Nor are the burials beneath the floors of the tholoi the only ones associated with them. East of the Southern Tholos, and about 50cm. away from it, three graves had been excavated (Loci 7-48, 7-52, and 7-54) which contained an infant, child, and young adult, respectively. These lay almost exactly 1.50m. apart, the regularity of their distribution suggesting that they may have been interred at the same time, or within a very short period. No graves, however, were found similarly located outside the Northern Tholos, although Locus 7-45 (a young adult's grave) lay only two metres east of that circular building. Furthermore, five additional burials lay between the two buildings, all in the b and c subdivisions of Square 4-J, while another (Locus 7-46) was in Square 4-K at the entrance to the U-shaped enclosure, Room 37. These were undoubtedly intended to be associated with the tholoi, and the remaining fifteen graves of Stratum XVII origin, although not so favorably situated, are likewise probably related to those buildings. Eleven of the fifteen lay east of a diagonal connecting the tholoi, where they were situated chiefly in Rooms 35, 34, and 23. The other four were west of the tholoi, three of them being in Square 4-K and one in 5-K. The latter are the first interments to be located so far from the eastern edge of the tepe since Stratum XII. Moreover, their position west of the tholoi is also a marked innovation, for no burials connected with the religious or secular buildings

of any stratum earlier than XII were situated in that direction. The occurrence of graves west of the tholoi may, of course, merely have been a practical measure in which this open area was utilized as a burying-ground, but it may also suggest that additional tholoi or other important structures may be found in the unexcavated portion of the mound somewhere near the western corner of the sounding. The four graves in Squares 4-K and 5-K now under discussion may, therefore, lie east or northeast of these presumed buildings, rather than west of the two known Stratum XVII tholoi.

Stratum XVIII Graves. Despite the presence in Stratum XVIII of a Temple, that stratum is represented by only seven graves excavated into the underlying stratum of XIX, or into débris just below XIX, at elevations of 0.66 to 1.95m. Four of these (Loci 7-73, 7-79, 7-80, and 7-83) were located close to the Temple where they occupied positions in Areas 12, 13, and 7, directly to the east of that edifice. A fifth, Locus 7-81, was to the south, in Area 1. The two remaining graves do not seem to have been associated with the Temple, for one of them, Locus 7-74, lay almost at the corner of the scarp in Area 25, while the other, Locus 7-82, had been placed below the western wall of Room 23. No graves had been dug in the

large open area north and northwest of the Temple which, in Stratum XVII, was the site of four graves, nor any in Area 2, south of the Temple.

Graves in Area A (Plate LXIV.b). The three graves discovered in Area A at the foot of the mound cannot be connected with any known occupational level, for they belong to some phase of the Halaf period not yet reached by excavations on the mound. One of the three graves in Area A (Locus G36-158) was found in Level F, while the others (Loci G36-159 and G36-160) lay just below that level. The twenty-four adults discovered in the Area A Well represent no formal interment, for they had been cast down the shaft without mortuary equipment, and without regard to position and orientation. A detailed description of the human remains contained in the Well has already been given in Chapter I, and an anthropometric report on a skull from the Well will be found in Chapter II.

B. TYPES OF GRAVES

(PLATES LX-LXIII.a; LXIV-LXVI)

Four main types of graves may be distinguished. They are: (1) inhumations; (2) urn burials; (3) graves with a single side-wall; and (4) graves enclosed by low walls made of *pisé*. Various sub-

TABLE A

Stratum of Origin	INHUMATIONS					URN							OTHER				
	With- out Cover	Mat- ting Cover	Libn Cover	Stone Cover	Plaster Cover	Open	Lidded	Cap- sule	Under			Brick Encl.	Side- Wall	Pisé	Misc.		
									Urn or Basket Sherds	Cover	Stone Encl.						
VIII	4	.	1	.	.	2	3	.	1	.	.	1	.	.	1		
IX	7	1	.	1	.	12	1	.	1	.	.	.	1	.	.		
X	10	.	1	.	.	5	4	.	.	.	.	.	2	1	.
X-A	7	3	1	.	.	4	.	.	.	.	.	.	3	1	.
XI	25	4	1	.	.	20	11	.	1	.	.	2	6	3	.		
XI-A	8	1	1	.	.	19	12	.	.	.	1	1	3	1	.		
XII	7	1	1	.	.	49	38	8	2	2	3	.	.	8	1		
XIII	1	.	.	.	1	1	1	.	2	.	.	1	.	1	1		
XIV	1	.	.	.	.	1	1	.	1	.	.	.	.	.	.
XV	10	.	.	.	.	.	.	.	.	.	.	.	.	.	.
XVI	6	.	.	.	.	1	.	.	.	.	.	.	.	.	.
XVII	27	.	.	.	.	.	.	.	2	.	.	.	.	.	1
XVIII	3	.	.	.	.	2	.	.	1	.	.	.	.	.	1
Area A	2	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Total Inhumations . .						137	Total Urn Burials . .							217	15	15	5

types or variations of each of the first three classifications will be discussed under those headings. In addition, four graves were uncovered which do not fall into any of the listed categories, and consequently form a miscellaneous group which will be described at the end of this section. Table A on the preceding page summarizes the stratigraphic distribution of graves of all varieties, and forms the basis of the following discussion.

Inhumations (Plates LX, LXI, LXII.a, LXIII.a, LXIV). Examples of this type of burial have been found in every stratum from VIII through XVIII, occurring in Area A as well. It is thus the only type of grave to persist through all strata covered by this volume, all other varieties either being totally unrepresented in certain strata, or restricted to limited periods in the history of Gawra. Inhumations were common in Strata XVIII through XV, as well as in Area A, for of the fifty-seven graves attributed to these strata no less than fifty were of this type. Beginning with Stratum XIV, however, their popularity declined until, in Stratum XII, only nine of the 120 burials represented the present variety. A limited degree of popularity seems to have been regained in Strata XI-A through VIII, where in some of these levels the inhumations approximate 40 to 50% of the totals, but their earlier importance is never recaptured.

In their simplest and most common form, the inhumations have no cover of any kind. These simple graves are the only type associated with Strata XVIII through XIV. Beginning with Stratum XIII, however, a new variety of inhumation appears in which the occupants of the graves are protected from contact with overlying earth by means of a matting, *libn* bricks, stone slabs, or plaster. Of these materials matting was the most popular, no less than nine graves being so covered in Strata XII through X-A. Brick-covered graves come next, but are represented by only one example in each of Strata XII, XI-A, XI, and X-A, and in Stratum VIII. A single slab-covered grave (Locus 47) under the Temple of Stratum IX, and a single plaster-covered grave (Locus 7-3) of Stratum XIII origin completes the list of covered graves. Altogether, therefore, the covered graves

are not very common, no more than five occurring in any single stratum, so that they never rival the simple inhumations in popularity. Despite this, they are of interest because of the parallel they furnish to the same feature in the tombs which, as we have seen, were roofed with nearly the same materials, namely, *libn*, stone, matting, and wood. No sweeping conclusions may be deduced from a comparison of the stratigraphic distribution of the roofed tombs and the covered graves, but it cannot be entirely fortuitous that the use of cover in graves, as in the tombs, is most common in Strata XI-A through X, and that covered graves should appear just before the introduction of the tomb type of burial in Stratum XI-A.

Urn Burials (Plates LXV, LXVI.a). The stratigraphic distribution of the 217 urn burials—the largest number to represent a single type of grave—is nearly as comprehensive as that of the inhumations. Urn burials have been found associated with almost all strata, but notable exceptions are Stratum XV and Area A. Burials of the urn type are, as matter of fact, extremely rare in strata earlier than XIV, only six having been discovered. Urn burials would therefore appear to have been wholly unknown in Halaf times (to judge by the limited evidence from Area A), and rare throughout the early part of the Obeid period or, in other words, exactly at the time when the simple inhumations were so common. Beginning with XIV, however, there is an extremely sharp rise in the number of urn burials, and a correspondingly marked decrease in the number of inhumations. This abrupt change is apparent from Table A, where 110 of the total of 133 burials contemporaneous with Strata XIV through XII were made in urns. Moreover, the popularity of the urn type of burial continued throughout Strata XI-A-VIII, although on a somewhat reduced scale. It is possible, of course, that the discovery of another cemetery at Gawra might tend to revise these figures, for the many adult burials conspicuously absent from the Stratum XII cemetery on the mound probably will be found largely in the form of inhumations. Nevertheless, that there was a profound shift at the time of Strata XIV-XII to the urn type of burial cannot be denied, for the infants and children who occupied the Stratum XII cemetery could

just as readily have been interred in simple graves. This change in type of burial is especially noteworthy because it occurs suddenly at a time when strong foreign influences were being made apparent in the material culture of the Gawrans,⁶ but whether we may connect the present phenomenon with the same source is problematical, for it is highly probable that it may represent an internal development at Gawra.

Seven sub-types of urn burials may be distinguished. The first and most popular variety merely employed an urn, which may have been any kind of a pottery vessel, from shallow bowls to large jars and pots (Plate LXVI.a). The remains of the deceased were placed in the vessel selected and then covered with earth. This type of burial, and indeed all types of urn burials, are usually the shallowest of all, the top of the urn often lying only 30 to 60cm. below the floor of the occupational level. The second sub-type consists of a lidded urn (Plate LXV.a); this refinement is first noted in Stratum XIV, but continues thereafter throughout all levels excepting Stratum X-A, although it is most popular in Strata XII, XI-A, and XI. The lidded urns are usually formed of two bowls (the top one being inverted); by a sherd placed over the mouth of the urn; or by a bowl placed on the neck or mouth of the urn. Examples of the third variety are formed of a double urn, two jars or pots always being used, with the top one inverted, thus forming a kind of capsule. In this variety, the joint is often sealed with clay plaster. Three of the five adults occupying urn burials were in this capsule type, obviously because it provided more space for the body. These capsule burials are characteristic only of Stratum XII,⁷ where eight examples were found.

In the fourth sub-type the urn is covered by a basket. Only two such burials were noted, both in Stratum XII. Fifth, we have urns which are enclosed, or covered, or both, with stones. Four burials—three in Stratum XII, and one in Stratum XI-A—were of this type. The sixth variety is similar to the one just described, except that the urns are

covered or enclosed with mud-bricks. A total of five urns from Strata XIII, XI-A, XI, and VIII belong to this type, of which three were merely covered with bricks (Plate LXV.b), while the other two were both enclosed and covered.⁸ In the last type of urn burial the deceased was interred beneath a covering vessel. This is one of the earliest varieties of urn burials, being represented in Strata XVII and XVI, as well as in XIII, XII, XI-A, and later strata. In the earliest levels, however, the covering "urn" is often merely a large sherd, or sherds; beginning with Stratum XIII an inverted vessel is employed.

Side-Walled Graves (Plate LXVI.b). This is one of the most interesting types of graves; it is represented by fifteen examples, all contemporaneous with Strata XI-A through IX, with twelve of the fifteen originating in Strata XI-A, XI, and X-A. As no side-walled graves originated in strata earlier than XI-A, or later than IX, they—like the tombs—become a distinguishing feature of the so-called Uruk period, but—unlike the tombs—the side-walled graves appear to be more characteristic of the early part of that era, falling into disfavor at the time of Stratum IX.

All graves in this category excepting one (Locus 146) are characterized by a single wall extending along one side of the skeleton. This wall is usually made of mud-brick, but one of the three side-walled graves from Stratum XI-A, the earliest stratum in which they are found, had a stone side-wall, while another from the same stratum had a wall formed of both *libn* and stone. The side-wall is usually formed of a single course of *libn* extending the length of the skeleton, but Locus 134, of Stratum XI origin, had a wall two courses high, while the "wall" of Locus 7-7 (Stratum X-A) was composed of a single brick. The widest divergence from the standard side-wall type, however, is represented by Locus 146, from Stratum XI, which possessed two walls, one on each side of the skeleton. This open-ended enclosure was two courses high, and was covered with a reed mat, upon which three mud-bricks had been placed. Typologically, therefore, this burial might be considered a transitional type

⁶ Cf. pp. 141 and 175-76.

⁷ Similar double-urn burials dating to Assyrian times, however, have been found at the foot of the mound.

⁸ One of these, Locus 6, is described in *TG.*, 143.

between the side-walled graves and the tombs, except that both are contemporaneous, and the present example is perhaps best described as an archaeological sport.

To turn to other unorthodox members of the side-walled group, the bricks forming the walls of these graves are commonly laid either as stretchers or as headers, but in one burial (Locus 242, from Stratum X-A) the bricks had been laid as headers at a tangent to the line of the skeleton, thus forming a wall whose inside and outside surfaces were serrated. Another curious method of bricklaying was adopted in Locus 7-30, from Stratum XI-A, resulting in a somewhat similar effect (Plate LXVI.b). Here the bricks had been placed on their edges, leaning against one another at an angle like books on a shelf, thus producing a serrated upper surface.⁹ All other graves with side-walls, however, had their bricks laid in the usual fashion.

The side-wall is usually oriented northwest-southeast, but three examples of east-to-west orientation were also found, as well as two instances of a northeast-southwest alignment. Except in the single instance (Locus 134, described above) where matting was stretched over the body, resting on the wall, the side-wall seems to have had no practical function, and if it possessed a symbolic meaning it has now been lost to us. The same lack of consistency noted in the orientation of these graves may also be observed in the position of the bodies occupying them, for six occupants of side-walled graves faced the wall, five had their backs turned to it, one was enclosed by a double wall, and the position of the remaining three could not be noted because of disintegration and disturbance of the bones.

The final detail to be noted in connection with graves of the present type is that none of them, excepting Locus 200, in Square 6-J of Stratum IX, and Loci 189 and 191 in Square 5-K of Stratum XI, seem to be associated with any of the religious buildings of Gawra. Locus 250 lay directly under the floor of Room 89 of the large secular building in Stratum XI-A, but the most curious detail to be

noted in connection with the horizontal distribution of the side-walled graves is their tendency in Stratum XI only, to occur in closely situated pairs, no more than fifty centimetres to one metre apart. Thus we have Loci 191 and 189 in Square 5-K near the western corner of the Temple of XI, Loci 134 and 146 in Square 6-O, south of the thick-walled building, and Loci 221 and 222 in Room 49. The side-walled graves do not seem to have been reserved for any particular age group, for nine of them were occupied by children, three by infants, one by a young adult, and two by mature adults.

Pisé Graves. These graves, fifteen in number, are characterized by very low walls made of hand-pressed mud, which completely enclose the burial. In this particular these graves strongly resemble the tombs, except that the walls of the latter are made of sun-dried bricks, are more regular in outline, and have higher walls. Furthermore, the *pisé* graves do not employ a cover or roof as extensively as the tombs, only four graves of the present type having this feature. The stratigraphic distribution of the *pisé* graves, moreover, shows that the type was introduced in Stratum XIII (cf. Table A), and was most popular in Stratum XII, in both of which strata the tombs are unknown. Nevertheless, the basic similarity between the low-walled *pisé* graves and the tombs, and the fact that, beginning with Stratum XI-A, the tombs appear to supersede the more rudimentary *pisé* type, provide an argument of some force for a connection between the two kinds of burials. Probably the *pisé* graves are to be interpreted as the forerunners of the tombs, appearing first in Strata XIII and XII as a refinement of the inhumation type of burial, and evolving as early as Stratum XI-A into the tombs. The persistence of the *pisé* graves into Strata XI-A through X is perplexing, but as the type is represented in these strata only by isolated examples, the fact is of no great importance. In Stratum IX they finally disappear, perhaps as a result of the revival in the popularity of the tombs in this stratum and in Stratum VIII-C (cf. Table D, Chapter II, p. 68).

In size, the *pisé* graves range from the 60 x 30, 65 x 35, and 64 x 35cm. dimensions of Loci

⁹ This method of brick-laying is typical of later Sumerian builders in southern Mesopotamia where, however, plano-convex bricks were employed.

G36-106 (Str. XII), G36-161 (Str. XIII), and G36-14 (Str. X), respectively, to the 110 x 60, 125 x 55, and 110 x 70 cms, measurements of Loci G36-17 (Str. XII), G36-87 (Str. XI-A), and G36-81 (Str. XI). The walls apparently never exceed a height of twenty to thirty centimetres, being barely high enough to enclose the body. The latest example of the *pisé* type of burial (Locus G36-14, from Stratum X) had walls 23cm. in height, formed of both *libn* and *pisé*, and the child occupying this grave was also covered with *pisé* or a mud plaster. Only three other *pisé* graves possessed a cover, Locus G36-81, of Stratum XI origin, likewise being covered with mud plaster, while both Loci G36-17 (Str. XII), and G36-39 (Str. XI) were covered with *libn*, which in the case of the former grave had been placed upon matting. The *libn* from Locus G36-17 measured 46 x 19 x 9cm.

A characteristic feature of the *pisé* graves consists in their irregular outlines. Contrasting with the sharp corners, straight walls, and square or rectangular ground plans of most of the tombs, the present graves often possess amorphous ground plans featuring rounded corners and curved or angled walls, which undoubtedly result from the nature of the material employed. One of the *pisé* graves (Locus G36-39, from Stratum XI) contained a double burial of an adult and a small child, laid foot to foot within the grave. Such double interments are unusual in any type of burial, and are represented by this single example in graves having *pisé* walls. Like the side-walled graves, the *pisé* burials do not appear to have been restricted to the members of any specific age group, for seven of their occupants were adults (mature and young), seven were children, one was an infant, and the relative age of the last could not be determined.

More interesting, however, is an examination of the horizontal distribution of the *pisé* graves in their respective strata of origin. The sole representative of this type of burial in Stratum XIII (Locus G36-161) was located in Square 4-G, b, where it was undoubtedly located in a missing part of the Eastern Shrine. Six of the eight *pisé* graves of XII origin were situated around two of the largest rooms in that stratum (Nos. 26 and 28); but the other two XII graves occurred on the fringes of the settle-

ment away from those buildings. The only *pisé* grave of Stratum XI-A lay in Square 3-O, where it occupied a position on the edge of the mound far from the two buildings around which most burials of all types in this stratum were concentrated. The three Stratum XI *pisé* graves, however, were all located in or around the Stratum XI Temple, in Squares 4-K (G36-80), 4-J (G36-81), and 5-J (G36-39). Stratum X-A possessed no large public building, and the single grave of the *pisé* type originating in that stratum was found in Square 7-K. Locus G36-14, our last example, was located on the edge of the mound in Stratum X. There is thus a tendency in the earlier *pisé* graves to locate them near temples or other public buildings, for ten of the thirteen *pisé* burials of Strata XIII through XI are so situated. It is tempting, therefore, to read into this fact an indication of some degree of importance for the occupants of the *pisé* graves, as for those in the tombs, but such a surmise is not corroborated by the furnishings of these graves which are no better or more extensive than those supplied the persons in graves of other types.

Miscellaneous Graves (Plate LXII.b). Five graves which do not fall into any of the previous classifications are grouped under this heading. The first of these is Locus 51, of Stratum VIII date, which was an infant burial in a U-shaped enclosure formed of *libn* bricks, open at the head. Only 16cm. deep, this enclosure was also covered with mud-bricks. This grave is comparable in some respects to Locus 146, a grave with double side-wall, but that burial originated in the much earlier stratum of XI (p. 108). The next anomalous grave (Locus G36-53) was provided by Stratum XII. It consisted of the skull of an infant with an enclosure formed of mud-bricks, lying directly under a Stratum XII wall in Square 5-K, possibly the western wall of Room 26. This curious burial can only be regarded as having a sacrificial significance, but the reason why only the skull was interred is of course unknown. This, and Locus 7-58 (Plate LXII.b), a simple inhumation from Stratum XVII, are the only certain examples of fractional burials found at Gawra, all other seemingly fractional graves finding an explanation in the complete decay of certain bones as, for example, the occupant of Tomb 110,

shown on Plate XXVII.¹⁰ There can be no doubt, however, in the present two instances, for only a skull was found in Locus G36-53 discussed above, while Plate LXII.b definitely shows that contemporary of Stratum XVII to lack at least one, if not both tibia. One of these bones may be the one shown lying alongside the pelvis, but such a position is unaccountable unless it is presumed that part of the leg had been turned under the body at burial, and even then a drastic post-burial displacement must be assumed in addition. Unfortunately the field notes give us no clue as to the nature of this bone, which may even be animal (i. e., the remains of a food offering), but in the case of the left leg of the same skeleton the tibia is definitely missing, as is shown by the position of the pottery vessels which occupy a spot just below the knee of the skeleton. In point of fact, the position of these vessels almost certainly proves that this person had been interred with both legs amputated at the knees, for it is hardly credible to assume that the offerings were placed between his legs, rather than at the foot of the grave. This interesting grave lay three metres south of the Northern Tholos, with which it is apparently associated.

Stratum XIII provides the next example of an isolated grave type. This grave (Locus G36-148) had been excavated in Square 4-O, and is shown as a rectangular double enclosure on the plans of Strata XV, XV-A, and XVI, in which it lay. It was formed by covering the sides of the grave shaft to a height of 73cm. above the floor with a thick mud plaster. Traces of matting, also covered with plaster, were found within the burial, probably from the cover supplied the skeleton, rather than from a roof. The dividing wall in the center was made of the same mud plaster, and presumably was intended to separate two or more occupants of the grave. However, this burial ("lined grave" may be the best descriptive term) had been thoroughly rifled, and contained no bones or objects, except for the painted jar illustrated on Plate CXXXI, Fig. 216.

The final grave is Locus 7-83, contemporaneous

¹⁰ The same explanation probably accounts for most of the fractional graves found at Arpachiyah, although a few of the graves so described are, in all likelihood, true fractional interments. Cf. *Ar.*, pp. 35-36, 38-43, and Plate III, Nos. b and d.

with Stratum XVIII. This was the burial of an infant, found below the floor level of Stratum XIX, 1.49m. above the datum. The occupant of this grave was encased in a shell, oval in plan, and oval in section, made of mud plaster. The thickness of this shell averaged about 25mm., while its dimensions were 49 x 31 x 15cm. This curious burial may represent a type which may yet prove to be more common in the uninvestigated lowest levels of the mound, but at the present time it must be classified in the present miscellaneous group until further examples are forthcoming.

C. PHYSICAL REMAINS AND BURIAL CUSTOMS (PLATES LX-LXIV; LXVI.b)

The physical remains found in graves in Area A, and in graves contemporaneous with Strata XVIII through VIII (exclusive of those from the latter stratum published in Volume I) are listed in the following table, where they have been classified by strata according to their relative age.¹¹

TABLE B

<i>Stratum of Origin</i>	<i>Infants</i>	<i>Children</i>	<i>Adults</i>	<i>Totals</i>
VIII	10	2	2	14
IX	13	9	2	24
X	11	11	2	24
X-A	8	11	0	19
XI	41	22	12	75
XI-A	29	11	7	47
XII	76	25	19	120
XIII	4	3	1	8
XIV	3	0	1	4
XV	6	1	3	10
XVI	2	3	2	7
XVII	5	7	19	31
XVIII	5	0	2	7
Area A	0	1	2	3
	213	106	74	393

It is obvious from this tabular analysis that the number of infants and children interred on the

¹¹ Anthropometric measurements and data on the sex of the individuals occupying the graves are, unfortunately, not available. Most skulls and skeletons were badly crushed or had disintegrated, the infants' and children's bones (which formed the largest part of the skeletal material) in particular being in extremely poor condition. Cf. *BASOR.*, 65, p. 6.

mound is disproportionately large, and that the number of adults is much smaller than that which could be expected to represent the centuries of occupation necessary for the construction of Strata XVIII through VIII. Moreover, the number of burials attributed to each stratum is considerably less than what we may surmise their populations to have been, even when the occupants of the tombs are added to the above table. There must be, consequently, an undiscovered cemetery somewhere on the plain near the mound; other evidence pointing to the same conclusion will be reviewed in Section E of this chapter. This postulated cemetery will probably be composed largely of adult burials contemporaneous with the strata listed in Table B or, more accurately, of Strata XVIII-I, if previously excavated levels are included. There is a possibility, however, that graves of Stratum XVII may not be included, this possibility arising from two factors. First, the graves of Stratum XVII on the mound are more numerous and contain adults in numbers that are more nearly normal, proportionately speaking, than do graves of any other stratum, for nineteen adults were found in Stratum XVII graves alone, while the remaining twelve strata listed are represented by fifty-five. Furthermore, the settlement of Stratum XVIII, in which the graves of Stratum XVII date are found, has been explored only in a restricted sector on the eastern edge of the mound, so it is likely that many more graves contemporaneous with Stratum XVII are to be found in other portions of the mound. The same probability, however, does not hold for later levels, for Strata X through I have been completely excavated, as have about half of Strata XVI through X-A. Even the uninvestigated portions of Strata XII through X-A have been partially explored by means of the ten-metre-wide sounding trench excavated from Squares 6-M and 6-O through 11-M and 11-O. No burial ground of uncommon size was disclosed in this sector, for only eighteen graves of Strata XII-X origin were discovered there, chiefly on the southwestern edge of the tepe. Consequently, until the remaining portions of Strata XIX and XVIII are excavated, or until the outlying cemetery is discovered, we cannot be certain where the remaining graves contemporaneous with Stratum XVII (and even XVIII) are to

be found, but, for the reasons cited above, it is probable that the main cemetery of Stratum XVII was located on the mound. Graves of all other levels, however, are almost certainly awaiting discovery elsewhere, as is indicated by the rarity of adult burials contemporaneous with all other strata, and by their total absence in Stratum X-A interments.

Turning now to a description of burial customs, only seven double-graves have been discovered in Strata XIX through IX, including the double-compartmented, plaster-lined grave of Stratum XIII date (Locus G36-148) which was described under the miscellaneous group of the preceding section. This burial had been thoroughly rifled, but the dividing wall in the center of this construction can hardly have been intended for any other purpose than that of separating two or more occupants of the burial. The remaining six double-graves were from Strata XVII (Locus 7-66), XII (Locus G36-1), XI (Loci 188 and G36-39), X (Locus G36-37), and VIII (Locus DD). The Stratum XVII double-burial was of an adult on one of whose arms rested a newly born child (Plate LXIII.a), and one of the two Stratum XI double-burials likewise contained a child and an adult. These graves probably contained women who met their deaths in childbirth, but the remaining double-graves cannot be so explained, although their significance is now lost. It cannot be entirely fortuitous, however, that all double-burials, omitting the Stratum XVII example, occupy important locations in their respective strata. Thus Locus G36-148 lay in Square 4-O, some distance northwest of the Stratum XIII Northern Temple; Locus G36-1 was situated in, or close to the White Room of XII; Locus 188 lay north of the thick-walled building on the northern edge of Stratum XI, and Locus G36-39 was at the rear of the temple in the same stratum. Locus G36-37 had been excavated in front of the Stratum X Temple, and Locus DD was situated close to the Central Shrine of Stratum VIII. On the other hand, these double-burials were not restricted to any single type of grave, for three were simple inhumations; one was an inhumation with mud-brick cover (Locus G36-1); one was a *pisé*-walled burial (Locus G36-39), and the last was the plaster-lined grave, (Locus G36-148). No triple burials, such as have

been encountered in the tombs, are known in grave form.

One of the most constant features of the inhumations, *pisé*, and side-walled graves is the contracted position of their occupants. Only four graves were uncovered in Strata XIX through IX whose occupants had their legs extended, all others being contracted. The degree of contraction is usually sharp, but many medium and slight examples were also found (cf. Chapter II, footnote 22, p. 78). The four extended burials, in which the skeletons were in supine positions, were produced by Strata XVII, XVI, XV, and X; of these the Strata XVII and

The orientation of the occupants of the graves is one of their least consistent features. The heads of the occupants of the graves were usually placed to the southeast and their feet to the northwest in those graves originating in Strata XVIII through XIII (as well as those found in Area A), while the reverse orientation of heads to the northwest and feet to the southeast seems to be the most common alignment of the bodies occupying graves contemporary with Strata XI-A through VIII. Two important modifications of these broad generalities should, however, be noted. First, exceptions are extremely common in all strata, often being

TABLE C
ORIENTATION OF SKELETONS

Stratum of Origin	SE-NW and NW-SE	SW-NE and NE-SW	N-S and S-N	E-W and W-E	Lying on the Left Side	Lying on the Right Side
VIII	3	2	0	0	2	5
IX	6	3	0	1	8	2
X	6	3	3	3	4	8
X-A	6	5	0	1	8	3
XI	21	5	5	5	25	9
XI-A	5	2	1	3	6	5
XII	1	0	2	8	6	6
XIII	0	4	1	0	2	1
XIV	0	0	0	1	1	0
XV	5	2	1	1	3	1
XVI	4	0	0	1	0	3
XVII	21	1	1	5	1	25
XVIII	2	0	1	2	2	2
Area A	1	0	1	0	1	2

XVI examples are illustrated on Plates LXII.b and LXI.b, respectively. The extended burial of Stratum XVII (Locus 7-58) is also of the fractional type, and has been described in the preceding section (pp. 110-11). Just how these extended burials are to be interpreted is problematical. It has been suggested that these departures from a distinctive racial custom must represent strangers, possibly from the south.¹² If so, they must represent some region not too far distant with which relations had been established in early Obeid times, for three of the four extended burials were discovered in consecutive strata, viz., XVII, XVI, and XV.

¹² Speiser, "Closing the Gap at Tepe Gawra" in *SR.*, 1939, p. 444. Cf. Woolley, *Antiquaries Journal*, Vol. X, No. 4 (Oct. 1930), Plate XLIV.a.

nearly as numerous as those examples oriented as described above. Second, as most of the skeletons discovered were those of infants or children, whose bones were often completely decayed or, in the case of urn burials, had been found in a confused mass, the orientation and position of these skeletons could not be recorded, and we thus possess only incomplete data on this important detail. Among the exceptions to the general orientations described above are a relatively large number of burials in Strata XVIII, XVII, XI-A, XI, and X whose occupants had been placed with their heads to the east or north, and feet to the west or south, but graves of more orthodox alignment exceed these in number. However, in the mere eleven graves of Stratum XII where orientation of the body could be

determined, eight had been placed with their heads to the east or west, two to the south, and only one to the southeast, so that, in the almost complete absence of southeast-northwest, or northwest-southeast orientations, the Stratum XII interments are unrelated to earlier and later burials. This fact, however, furnishes an interesting link with the tombs, for it shows that the north-south and east-west orientations which have been observed in tombs of Strata XI-A and XI origin (cf. Chapter II, Table E, p. 77) first had their inception in graves of Stratum XII, before the tomb type of burial had been inaugurated.

In regard to the position of the skeletons on either the right or left side, the figures in the last two columns of Table C include only those burials where this detail could definitely be ascertained; hence almost all urn burials, and many graves of other types where the bones of the occupants had disintegrated, are not represented. It should also be noted that the occupants of a number of graves were in a half-turned position, the upper part of the body resting on the back, but with one leg resting upon the other in the usual contracted position (cf. Plates LX.a, LXIV.b). Such a position, in most if not all cases, is undoubtedly due to post-burial movement brought about by the pressure of the earth resting upon the body, and it may safely be assumed that these persons had originally been interred on either the right or left side.

The orientation undoubtedly determined to some degree whether the body was placed on its right or left side, but there does not seem to have been any rigid rule in any stratum requiring the deceased to face in any particular direction. The position of the body on the right or left side seems, on the other hand, to have been subject to its own customs, for Table C shows the occupants of the graves originating in the earliest strata, as well as in Area A, to have been placed with only four exceptions on their right sides. In Strata XV through XI-A this remarkably uniform practice seems to have been abandoned, and the skeletons of the inhabitants of those strata are found resting on either side in nearly equal numbers. This is in turn superseded in Strata XI through VIII by a general left-side position, although many examples of dextral posture also

occur. As a matter of fact, a majority of the interments of Strata X and VIII contained skeletons which rested on their right sides, so that no hard-and-fast rule may be applied to the graves of Strata XI through VIII.

The hands of the occupants of the graves of the inhumation, side-wall, and *pisé* types are uniformly raised to the head or face, or rest just in front of the face (Plates LX.a, LXI.a, LXII.a, LXIV.a, LXVI.b). This is the characteristic position of the hands in graves of all levels, but eleven skeletons were uncovered whose hands had been placed on the knees (Plate LX.b), five whose arms were extended at right angles to the body, four whose hands rested on the pelvis, and eight whose arms lay alongside the body (Plates LXI.b, LXIV.b). Nearly half of these exceptions occurred in graves of Stratum XII origin; that stratum, as we have already seen, was also distinguished by innovations in orientation, and by the introduction of new types of graves. Graves whose occupants had each hand or arm in a different position were rare; one example is shown in Plate LXII.b (Locus 7-58). That grave is unusual not only in this respect, but also because it is a fractional burial, with the skeleton in a supine position. The occupants of the tombs likewise were usually found in attitudes where the hands were held before the face or shoulders but, like the exceptional graves mentioned above, a few tomb burials were also characterized by skeletons whose arms lay at the sides of the body, or extended away from it.

This examination of burial customs may be concluded with a description of the use of matting or rushes in the graves. The employment of matting as a cover for the body in graves of the inhumation and side-wall types has already been discussed (cf. pp. 107-8; also Table A) where it was seen that matting-covered graves occur only in Area A, in Strata XII through X-A, and in Stratum IX. Graves containing matting upon which the body was placed were more numerous, totaling thirty-five. It is interesting to learn that these have a stratigraphic distribution closely paralleling that of the matting-covered graves. A single burial in Area A was mat-lined (Plate LXIV.b), while the floors of only two of the twenty-eight Stratum XVII graves

not of the urn type had been covered with reeds or rushes. No underlying matting was provided in the interments of Strata XVI through XI-A, but some graves originating in every succeeding stratum through Stratum VIII had matting-covered floors. The three graves of Stratum XI with covered floors employed reeds. Analogous uses of matting in the tombs were described in Chapter II, but no wrappings of cloth such as was discovered in two tombs (cf. p. 78) are known in the graves. A more important omission, however, is the complete absence of pigment in graves. The custom of placing pigment on the body is thus typical only of tomb burials (cf. pp. 78-79).

There is good reason to believe that whenever pottery vessels form part of the grave furnishings, those vessels originally contained food. In many cases the remains of grain, as well as animal bones, were found in the bowls and jars accompanying burials (Plate LXIII.b). In many other instances, however, the animal bones were loose, presumably because no vessels large enough to accommodate them were available (Plates LXII.b and LXIII.a). This custom of supplying the deceased person with food, presumably for his underworld journey, does not seem to be restricted to any stratum or period, but such food offerings are never found with burials of the urn type, nor do they usually accompany graves of any variety containing infants or children.

D. GRAVE FURNISHINGS (PLATES LX.b-LXIV)

The graves of almost all strata are usually poorly furnished. This is especially true of the graves of Strata XV through VIII, whose occupants, with but few exceptions, had no funerary equipment of any type excepting beads, which are common in burials of all levels. The inhumation, side-walled, and *pisc* burials originating in Strata XV through VIII are usually barren of objects; however, a very high proportion of burials contemporary with these strata had been made in pottery vessels employed as urns, so that these vessels and their covers thus constitute the greatest source of specimens of the material culture of this period, if the objects from the tombs are excluded.

Objects are somewhat more common in burials having their source in Strata XVIII through XVI, but are never abundant except in the inhumations of Stratum XVII. This fact may reflect a higher degree of posterity in the period represented by that stratum, or may simply indicate a change in burial custom. In the earlier strata the funerary equipment was usually placed at the foot of the grave. In only a very few instances were the furnishings elsewhere, but in Locus 7-27 of Stratum XV origin (Plate LXL.a), and in Loci 7-77, 7-61, and 7-57, all from Stratum XVII, the objects lay near the skulls of their respective occupants. One grave in Area A (Locus G36-158) also contained a pottery vessel placed at the skull, while another burial in the same sounding at the foot of the mound (Locus G36-159) had a pot at the right elbow of the skeleton, and another at the feet. Further minor exceptions to the general rule are provided by Loci 7-68 and 7-66, both of Stratum XVII origin, where all objects had been placed at the foot of these graves, excepting a stone bowl at the mouth of each of the skeletons.

A review of the richest graves is our next task. To begin with the earliest burials, the first interment of special interest is Locus 7-80, from Stratum XVIII. This grave was furnished with the largest collection of stone vessels of any burial, comprising four marble bowls (Plate CLXXX, Figs. 75-78) and a stone palette (Plate XCVII.a, No. 7), as well as a painted jar (Plate LXXII.a, No. 4) and, at the neck of the skeleton, a serpentine pendant (Plate XCI.b, No. 3). Near the femora was a blade of brown speckled obsidian, which is unillustrated. Next is Locus 7-68, of Stratum XVII origin. The variety and kind of objects contained by this grave seem to indicate that its occupant was a craftsman of some kind (Plate LXIII.b). Besides two pottery jars, a dish of the same material, and a stone bowl, this burial was furnished with a stone palette (Plate XCVII.a, No. 8), two flattened stones, an animal's tooth, and some stone chips.

Another Stratum XVII grave of interest is Locus 7-67, which was furnished with a small jar (Plate CXXIII, Fig. 115) and three clam shells, while the decayed remains of a small wooden implement, perhaps a spatula for applying ointment or paint,

was also observed. Locus 7-58, also of Stratum XVII origin, has already been described as one of the two fractional burials produced by Gawra (pp. 110-11), but it is of further interest because it was furnished with a clam shell of the type encountered in Locus 7-67, described above, and thirty-four conical terra cotta objects with bent tips (cf. Chapter V, p. 170, and Plate LXXXIV.c). These curious objects, which are probably gaming pieces, lay on both sides of the skeleton at the pelvis, while a single specimen was discovered on the ribs (Plate LXII.b).

Three graves of Stratum XVI date are also noteworthy because of their furnishings. Locus 7-43 contained, in addition to pottery vessels, an unillustrated spindle whorl of hemispherical shape; it is the only grave of any stratum to contain an object of this type, although five whorls (probably later intrusions) were found in Tomb 169 (cf. p. 81). Locus 7-37, an infant's grave, boasted the unique terra cotta rattle and ram figurine illustrated on Plate LXXXII.b. These are probably the earliest toys, identifiable as such, yet recovered at any site. Locus 7-47 (Plate LXI.b), an extended burial described in Section C of the present chapter, lacked the usual pottery bowls and jars found in graves of early Obeid times, but contained instead three miniature pottery jars (Plate CXXIII, Figs. 116, 119, and 121); a pebble with a flattened surface such as has been encountered in Locus 7-68; an obsidian blade and, at the left wrist, a tanged pendant with engraved decoration (Plate CLXXII, Fig. 20).

None of the graves of Strata XV, XIV, and XIII, is notable for its furnishings. The only important burials of Stratum XII or Loci G36-131 and G36-29, both urn burials which are distinguished by the unique painted decoration of the urns. The urn of No. G36-131 (the so-called Landscape Jar) is illustrated on Plate CXXXIX, Fig. 309 (=Plate LXXVIII); that of Locus G36-29 (the "Nursery Pot") may be seen on Plate CXXXVI, Fig. 280 (=Plate LXXIX.e).

Stratum XI-A had two graves worthy of attention. One of these was Locus 238, the grave of a youth supplied with a macehead. The other was Locus G36-171, the urn burial of a child less than ten years of age who was equipped with a bone

playing pipe or whistle (Plate CLXXXII, Fig. 15—Plate XCIX.d, No. 3).

Three graves of Stratum XI are next in order. Two of these (Nos. 142 and 167) lay close to the northwest-southeast wall of the thick-walled building on the northern edge of the Stratum XI settlement. They contained a gold ornament each (both unillustrated), which appear to have been employed as head ornaments, for both were found on the skulls of the occupants of the graves. The ornament from Locus 142 was a small disc of gold foil, pierced in the center; that from Locus 167 had a bitumen core covered with gold foil, but had been smashed by the pressure of overlying earth. In addition, the occupant of Locus 142 (a young adult) had been equipped with the fine, canoe-shaped macehead illustrated on Plate XCIV.d.

Locus 181 is perhaps the most important grave of any found on the mound, from the standpoint of the objects which it contained. It had been excavated from the central chamber of the Stratum XI Temple, next to the podium (cf. p. 101), so that it definitely contained a sacrifice. Its occupant, a child, was furnished with a gold rosette with extruding nipple of the same material (Plate CLXXXV, Fig. 76), and a gold disc-shaped ornament (Fig. 74), both of which lay on the skull (Plate LXIII.a). In addition, a set of stone gaming pieces (Plate CLXXIX, Fig. 53, and Plate XCVI.a, Nos. 2, 3, 5, 7-12) were found in a pile at the hands and knees, perhaps originally contained in a bag, while beads of stone and gold occurred at each wrist. All these objects, excepting the gold ornament, are duplicated in the collections from the tombs, this fact forming a most important link in the chain of evidence connecting the tomb-builders with the indigenous population of Gawra.

The graves of Strata X-A through VIII were poorly furnished, particularly when compared to contemporaneous tombs. A single exception is Locus 47, from Stratum IX.¹⁵ This was the only stone-covered grave discovered, and it lay 1.30m. below the floor of Room 903A of the Stratum IX Temple, so that it was undoubtedly a burial of the sacrificial type. The infant occupying the grave was

¹⁵ Other exceptions are two graves of Stratum VIII origin published in *TG.*, 141-42 (Nos. 10 and 13).

furnished with a headband of gold, found in position, and beads of gold, carnelian, and lapis lazuli.

The most important grave furnishings will be described in detail in the following chapters, together with objects from stratified debris, in accordance with material and typological classifications. In those chapters, the objects from the graves are stipulated to belong to the specific stratum in which each grave was found, rather than to the stratum of origin, so that the attributions made in Section A of the present discussion are almost completely disregarded. In the present chapter, the origins of whole groups of graves were established by a consideration of their elevations, and by their horizontal distribution in the stratum presumed to be contemporaneous. Temples and other important buildings were common at Gawra, and since in most cases clusters of graves were found a stratum or two below the location of most of those buildings, such evidence has been considered sufficient to conclude that those burials, and other burials occurring at the same elevations, were contemporaneous. But it is not always possible by such a method to state unequivocally that every grave found in Stratum XII, for example, originated in Stratum XI-A, for too many factors may enter into the attribution of a single, specific grave. Thus, while the general statement that all graves dug into Stratum XII debris (to continue with our present example) originated in Stratum XI-A is probably correct in an overwhelming number of instances, it is also possible that a few graves found in Stratum XII may be contemporaneous with Stratum XI, or even X-A, and the same qualification is applicable to graves originating in almost all other strata. It has seemed proper, therefore, to describe grave objects with those from the stratum in which they were found, and this procedure has been followed in subsequent chapters.

While we are not now called upon to describe the grave furnishings in detail, it has been deemed advisable to incorporate in the present discussion a description of those graves which have contributed the illustrated objects. It is felt that such information is required because the present examination of the graves has dealt largely with groups and types, rather than with individual examples; in like man-

ner, different types of objects from the same grave will be found dispersed through the subsequent chapters. Table D, which follows, therefore contains a description of these selected graves and their occupants, as well as plate and figure references to the illustrated objects yielded by them, thus providing a single reference source for grave furnishings, and a cross-section of grave types.

TABLE D¹⁴*Stratum X Graves*

Locus

- | | |
|-----|--|
| 190 | In 7-M, X-A; elevation 11.17m. Lidded urn burial, infant.
Plate CXLVIII, Fig. 429 (painted jar). |
| 206 | In 5-J, X; elevation 11.00m. Simple inhumation, child, contracted, position of hands indeterminate, NW-SE, right side.
Plate CXLVIII, Fig. 431 (jar). |

Stratum X-A Graves

Locus

- | | |
|-----|--|
| 100 | In 6-O, XI; elevation 10.57m. Urn burial, infant.
Plate CXLIV, Fig. 370 (bowl). |
| 126 | In 6-M, XI; elevation 10.47m. Urn burial, child.
Plate CXLVII, Fig. 417 (pot). |

Stratum XI Graves

Locus

- | | |
|-----|--|
| 142 | In 5-Q, XI-A; elevation 9.13m. Simple inhumation, young adult, sharply contracted, hands on knees, SE-NW, left side.
Plate XCIV.d and f (slate mace-head). |
| 164 | In 5-M, XI-A; elevation 8.58m. Lidded urn burial, infant.
Plate CXLII, Fig. 347 (pot). |
| 175 | In 4-J, XI-A; elevation 8.88m. Urn burial, <i>libn</i> cover, infant.
Plate CXLII, Fig. 343 (spouted pot, burnished). |
| 181 | In 4-K, XI-A; elevation 9.03m. Simple inhumation, child, medium contraction, hands at knees, W-E, left side.
Plate CLXXV, Figs. 74 (gold ornament) and 76 (gold rosette). |

¹⁴ In this table, no details of the orientation and position of the skeletons in urn burials are given, as it was impossible to determine these in the field. When the orientation of the body in other types of burials is specified, the first direction given is that of the head.

Stratum XI Graves

Locus

- Plate CLXXIX, Fig. 53 (= Plate XCVI.a, No. 11 alabaster gaming piece).
Plate XCVI.a, Nos. 2, 3, 5, 7-12 (gaming pieces).
- G36-129 In 7-S, a, below XI; no elevation. Urn burial, adult.
Plate CXLVI, Fig. 407 (double-rimmed pot).

Stratum XI-A Graves

Locus

- 230 In 6-Q, XII; no elevation. Lidded urn burial, infant.
Plate CXXXVIII, Fig. 303 (jar).
- 236 In 5-M, XII; elevation 7.63m. Urn burial, infant.
Plate CXL, Fig. 321 (bottle).
- 250 In 5-M, XII; elevation 7.57m. Stone side-wall, child, sharply contracted, hands to face, SE-NW, right side.
Plate CXL, Fig. 316 (jar).
- 254 In 5-Q, XII; elevation 7.50. Urn burial, infant.
Plate CXXXVI, Fig. 275 (painted pot).
- 255 In 4-Q, XII; elevation 7.27m. Lidded urn burial, child.
Plate CXXXV, Fig. 269 (painted cup).
- 259 In 6-S, XII; no elevation. Urn burial, infant.
Plate CXXXVIII, Fig. 298 (spouted pot, burnished).
- G36-8 In 5-Q, XII; no elevation. Lidded urn burial, infant.
Plate CXXXVIII, Fig. 296 (spouted pot, painted).
- G36-9 In 5-Q, b, XII; no elevation. Lidded urn burial, child (?).
Plate CXXXVII, Fig. 291 (pot).
- G36-10 In 5-Q, XII; no elevation. Lidded urn burial, infant.
Plate CXXXIV, Fig. 250 (painted bowl).
- G36-51 In 5-Q, XII; no elevation. Urn burial, infant (?).
Plate CXXXVII, Fig. 288 (painted pot).
- G36-57 In 5-M, a, XII; no elevation. Urn burial, infant (?).
Plate CXXXVIII, Fig. 306 (painted jar).
- G36-62 In 5-M, a, XII; no elevation. Lidded urn burial, infant (?).

Plate CXXXIV, Fig. 248 (painted bowl).

- G36-77 In 6-K, d, XII; no elevation. Urn burial, infant.
Plate CXXXIX, Fig. 308 (painted jar).
- G36-171 In 11-M, XII; no elevation. Lidded urn burial, child.
Plate CLXXXII, Fig. 15 (= Plate XCIX.d, No. 3, bone playing pipe).

Stratum XII Graves

Locus

- 287 In 5-S, below XII; elevation 7.38m. Lidded urn burial, child.
Plate CXXXVII, Fig. 284 (painted pot).
- 291 In 4-O, below XII; elevation 7.45m. Lidded urn burial, infant.
Plate CXXXVII, Fig. 282 (pot).
- 294 In 4-Q, below XII; elevation 7.94m. Lidded urn burial, infant.
Plate CXXXVI, Fig. 277 (pot).
- 301 In 4-Q, below XII; elevation 7.01m. Urn burial, infant.
Plate CXL, Fig. 315 (painted jar).
- 307 In 4-M, below XII; elevation 7.08m. Lidded urn burial, infant.
Plate CXXXVII, Fig. 286 (painted pot).
- 308 In 4-M, below XII; elevation 7.65m. Urn burial, infant.
Plate CXXXVII, Fig. 290 (pot).
- 310 In 4-O, below XII; elevation 7.08m. Capsule urn burial, child.
Plate CXXXVI, Fig. 274 (pot).
- 317 In 4-M, below XII; elevation 7.07m. Lidded urn burial, infant.
Plate CXXXVIII, Fig. 304 (painted jar).
- 321 In 5-S, below XII; elevation 7.63m. Urn burial, infant.
Plate CXXXVIII, Fig. 299 (spouted pot).
- G36-23 In 4-K, below XII; no elevation. Urn burial, infant.
Plate CXXXVIII, Fig. 302 (incised jar).
- G36-25 In 5-M, b, below XII; no elevation. Lidded urn burial, child.
Plate CXXXVII, Fig. 285 (painted pot).
- G36-29 In 4-K, c, below XII; no elevation. Urn burial, infant.
Plate CXXXIX, Fig. 309 (= Plate LXXVIII.a and b; painted jar).

Stratum XII Graves

Locus

- G36-59 In 3-M, a, below XII; no elevation. Urn burial with basket cover, infant. Plate CXXXVII, Fig. 292 (painted pot).
- G36-61 In 4-K, a, below XII; no elevation. Lidded urn burial, infant. Plate CXXXIV, Fig. 259 (painted bowl). Plate CXXXVIII, Fig. 297 (spouted pot, burnished).
- G36-63 In 4-M, d, below XII; no elevation. Urn burial, child (?). Plate CXXXVI, Fig. 279 (painted pot).
- G36-65 In 4-J, c, below XII; no elevation. Lidded urn burial, infant. Plate CXXXV, Fig. 262 (painted bowl).
- G36-66 In 3-M, a, below XII; no elevation. Lidded urn burial, infant. Plate CXXXIII, Fig. 238 (painted bowl).
- G36-69 In 4-M, c, below XII; no elevation. Lidded urn burial, infant (?). Plate CXXXVII, Fig. 287 (painted pot).
- G36-70 In 5-K, c, below XII; no elevation. Lidded urn burial, child. Plate CXXXV, Fig. 264 (painted bowl).
- G36-71 In 4-K, a, below XII; no elevation. Urn burial, infant. Plate CXXXVI, Fig. 278 (painted pot).
- G36-94 In 3-M, d, below XII; no elevation. Urn burial, infant. Plate CXXXV, Fig. 266 (painted beaker).
- G36-99 In 6-K, d, below XII; no elevation. Lidded urn burial, infant (?). Plate CXXXVIII, Fig. 300 (incised jar).
- G36-101 In 3-K, b, below XII-A; no elevation. Lidded urn burial, infant. Plate CXXXVI, Fig. 273 (painted pot).
- G36-106 In 5-M, below XII; no elevation. Pisé burial, 60x30cms., child, medium contraction, arms extended away from body, W-E, right side. Plate CLXXI, Fig. 16 (= Plate XCII.a, No. 3; engraved bead).
- G36-107 In 5-K, d, below XII; no elevation. Lidded urn burial, infant. Plate CXXXIV, Fig. 257 (painted bowl).
- G36-119 In 3-K, a, below XII; no elevation.

Lidded urn burial, infant.

Plate CXXXVIII, Fig. 301 (jar).

- G36-124 In 5-J, d, below XII; no elevation. Lidded urn burial, young adult. Plate CXXXVIII, Fig. 305 (painted jar).
- G36-126 In 5-J, d, below XII; no elevation. Lidded urn burial, young adult. Plate CXXXV, Fig. 268 (beaker).
- G36-131 In 5-J, below XII; no elevation. Lidded urn burial, child. Plate CXXXVI, Fig. 280 (= Plate LXXIX.c, painted pot).
- G36-141 In 4-G, b, below XII; no elevation. Lidded urn burial, infant. Plate CLXXV, Fig. 68 (grooved ornamental stud).
- G36-154 In 6-S, a, below XII; no elevation. Lidded urn burial, infant. Plate CXXXIV, Fig. 249 (painted bowl).
- G36-156 In 6-Q, c, below XII; no elevation. Lidded urn burial, child. Plate CLXXXI, Fig. 88 (marble jar).

Stratum XIII Graves

Locus

- G36-148 In 4-O, below XIII; elevation 5.58m. Plastered double-enclosure, disturbed. Plate CXXXI, Fig. 216 (painted jar).
- G36-157 In 4-J, a, below XIII; no elevation. Lidded urn burial, child. Plate CXXXVII, Fig. 171 (deep bowl).
- G36-165 In 5-E, c, below XIII; no elevation. Lidded urn burial, infant. Plate CXXXVII, Fig. 180 (painted pot).
- 7-6 In 3-M, XV; elevation 5.06m. Simple inhumation, young adult (?), contracted. Disturbed — orientation and position indeterminate. Plate CXXIV, Figs. 127, 132, and 133 (painted bowls).

Stratum XVI Graves

Locus

- 7-37 In 5-G, below XVII; elevation 3.50m. Simple inhumation, infant, contracted; orientation and position indeterminate. Plate CLIV, Fig. 12 (= Plate LXXXII.b, No. 2; animal figurine). Plate LXXXII.b, No. 1 (rattle).
- 7-38 In 3-J, below XVII; elevation 3.45m. Urn burial, infant. Plate CXXI, Fig. 95 (painted bowl).

*Stratum XVI Graves**Locus*

- 7-43 In 3-J, below XVII; elevation 3.67m. Simple inhumation, adult, medium contraction, hands to face, SE-NW, right side.
Plate CXXII, Fig. 106 (painted jar).
- 7-47 In 4-G, below XVII; elevation 3.67m. Simple inhumation, adult, extended, arms at sides, NW-SE, supine.
Plate CXXIII, Figs. 116, 119, 121 (miniature jars).
Plate CLXXII, Fig. 20 (tanged pendant).
- 7-53 In 3-J, below XVII; elevation 3.68m. Simple inhumation, child, medium contraction, hands to face, SE-NW, right side.
Plate CXXI, Fig. 94 (painted bowl).
- 7-69 In 3-J, below XVII; elevation 3.43m. Simple inhumation, child, medium contraction, hands at knees, SE-NW, right side.
Plate CXXI, Fig. 90 (painted bowl).
Plate CXXIII, Fig. 118 (miniature jar).

*Stratum XVII Graves**Locus*

- 7-45 In 3-J, XVIII; elevation 3.06m. Simple inhumation, young adult, sharply contracted, hands to face, SE-NW, right side.
Plate CXXI, Fig. 98 (painted bowl).
- 7-52 In 4-J, XVIII; elevation 2.43m. Simple inhumation, child, sharply contracted, hands to face, E-W, right side.
Plate XC.a, No. 2 (string of beads).
- 7-54 In 5-J, below XVIII; elevation 2.75m. Simple inhumation, young adult, sharply contracted, hands to face, S-N, right side.
Plate CXXI, Fig. 99 (painted bowl).
- 7-57 In 3-J, XVIII; elevation 2.72m. Simple inhumation, child (5-6 yrs.), sharply contracted, hands at pelvis, SE-NW, right side.
Plate XC.b, Nos. 1, 2 and 3 (strings of beads).
- 7-58 In 3-J, XVIII; elevation 2.67m. Simple inhumation, fractional, adult, extended, right hand to face, left at right elbow, SW-NE, supine.
Plate LXXII.c (painted jar).
Plate LXXXIV.c (terra cotta gaming pieces).

- 7-59 In 4-J, XVIII; elevation 1.90m. Simple inhumation, adult, sharply contracted, hands to face, SE-NW, right side.
Plate LXXII.b (painted jar).
- 7-61 In 4-G, XVIII; elevation 2.96m. Simple inhumation, young adult, sharply contracted, hands to face, SE-NW, right side.
Plate XC.a, No. 4 (string of beads).
- 7-62 In 3-J, XVIII; elevation 3.02m. Simple inhumation, young adult, medium contraction, hands to face, SE-NW, right side.
Plate CXX, Fig. 88 (painted bowl).
Plate LXXIII.c, No. 2 (painted jar).
Plate XC.a, No. 3 (string of beads).
- 7-66 In 3-J, XVIII; elevation 2.85m. Simple inhumation, young adult and infant. Adult: medium contraction, arms extended away from body, SE-NW, right side; infant lying on right arm.
Plate CXIX, Fig. 76 (bowl).
Plate CXXII, Figs. 104 and 111 (painted jars).
Plate CLXVII, Fig. 140 (seal).
Plate CLXXX, Figs. 79 and 80 (marble bowls).
- 7-67 In 4-K, below XVIII; elevation 2.33m. Simple inhumation, adult, medium contraction, left hand to face, position of right indeterminate, SE-NW, right side.
Plate CXXIII, Fig. 115 (painted miniature jar).
- 7-68 In 4-J, below XVIII; elevation 2.24m. Simple inhumation, adult, sharply contracted, hands to face, SE-NW, right side.
Plate CXXII, Figs. 108 and 109 (painted jars).
Plate CLXXXI, Fig. 81 (marble bowl).
Plate XCVII.a, No. 8 (breccia palette).
- 7-70 In 4-G, XVIII; elevation 2.48m. Simple inhumation, adult, slightly contracted, hands to face, SE-NW, right side.
Plate CXXI, Fig. 89 (= Plate LXXIII.d, painted bowl).
Plate CXXII, Fig. 102 (painted jar).
Plate LXXIII.c, No. 1 (painted jar).
- 7-72 In 3-G, XVIII; elevation 2.50m. Simple inhumation, adult, medium contraction, hands to face, SE-NW, right side.
Plate CXXII, Fig. 103 (painted jar).
Plate LXXII.a, No. 1 (painted bowl).

Stratum XVII Graves

Locus

- 7-76 In 4-J, XVIII; elevation 2.40m. Simple inhumation, adult, sharply contracted, hands to face, E-W, right side. Plate LXXII.a, No. 7 (jar).

Stratum XVIII Graves

Locus

- 7-73 In 4-J, below XIX; elevation 0.66m. Urn burial, infant. Plate CXX, Fig. 82 (jar).
- 7-80 In 4-G, XIX; elevation 1.88m. Simple inhumation, adult, medium contraction, hands to face, NE-SW, right side. Plate LXXII.a, No. 4 (painted jar). Plate XCL.b, No. 3 (pendant). Plate CLXXX, Figs. 75-78 (marble bowls). Plate XCVII.a, No. 7 (palette).

Graves in Area A

Locus

- G36-158 In Level F. Simple inhumation, child, contracted, hands at pelvis, S-N, left side. Plate CXIII, Fig. 27 (painted bowl).
- G36-159 Below Level F. Inhumation on reed mat with similar cover, young adult, medium contraction, arms at sides, SE-NW, right side. Plate CXV, Fig. 49 (painted jar).

E. CONCLUSIONS

The purely descriptive account of the graves, constituting Sections A through D of this chapter, has now been concluded. Up to this point we have discussed the horizontal distribution of the graves, the various grave types, and the physical remains and burial customs. In addition, we have examined some of the more general aspects of the funerary furnishings, leaving a detailed description of the objects found in graves to later chapters. As a result of this examination of the data provided by the graves, a few conclusions and interpretations may now be submitted.

(1) As has been suggested in Section C of this chapter, there is reason to believe that another cemetery is to be found somewhere on the plain near the mound of Gawra. The various factors pointing to such a conclusion are as follows: (a) The less than five hundred persons interred on the mound, in

both tombs and graves, can represent only a small percentage of the total population of Gawra during the many centuries of occupation necessary for the creation of Strata XVIII through VIII. (b) No graves have been found which can be related to Strata VII through I.¹⁵ Although Stratum VI alone of these seven levels represented an extensive and important occupation, graves of the occupants of all seven strata must exist. The fact that they have not yet been discovered is almost certain proof that they are located in some area, probably at the foot of the mound, not yet investigated. (c) The mound, even in periods when it was used as a necropolis, was not always a popular burial ground. Many strata are represented by only a few interments such as Stratum XIII with eight, Stratum XIV with four, Stratum XV with ten, Stratum XVI with seven, and Stratum XVIII with seven. Even so densely populated a settlement as Stratum XI-A had only forty-seven contemporaneous graves, yet the population of that community must have been many times that number. (d) The remains of 393 persons whose relative age could be determined were discovered in graves in all strata from Stratum IX through XIX (cf. Table B). Of these, only seventy-four were young or mature adults, while 319 were infants and children, or in percentage figures, over 80% of the mound burials contained infants or children. This figure may be compared to the forty-four infants and children interred within tombs (Chapter II, p. 78), which were 64% of that total. Both figures may be regarded as disproportionate and inaccurate so far as representing the composition, by age groups, of the Gawra population.¹⁶ The bias of our figures probably results from a selective principle followed in Strata XVI through VIII, by which many infants and children were buried on the mound, probably for religious reasons, while almost all adults were interred in some other cemetery located away from the mound. This practice, however, does not appear to have been followed in the earliest mound burials, viz., those originating in Strata XVII and XVIII, for of the thirty-eight persons interred in graves of

¹⁵ TG., 140.

¹⁶ Cf. the mortality tables in TH., Figs. 49, 73, and 150.

those two strata, twenty-one were adults, while only seventeen were infants and children (cf. Table B, p. 111).

The four reasons just listed constitute almost positive proof that at least one other Gawra cemetery was in use during the lengthy period represented by Strata XVI through I, and possibly including XVIII also. Because of this evidence of the existence of a cemetery which must be located outside the mound, trenching operations were conducted in the sixth (1936-37) and seventh (1937-38) seasons on the plain surrounding the mound. These soundings probed areas from fifty to one hundred and fifty metres from the base of the mound in all directions except to the west, but no graves were discovered except at the southwest, where a few urn burials of Assyrian date were found.¹⁷ It is probable, therefore, that the main cemetery of Gawra is located directly to the west of the mound, where unfortunately it was impossible to explore, owing to questions of crops and land ownership. If the Gawra cemetery is indeed to the west of the mound, as the negative evidence furnished by the soundings would seem to indicate, its location would agree with that of the cemetery of Obeid date at Arpachiyah, which also lay west of the mound. The discovery of the main Gawra cemetery would be of paramount importance, not only for the objects which its burials would contain, and for the additional light which it could throw on burial customs, but also as a source of information of an anthropometric nature, which the badly crushed bones of the inhumations on the mound have been unable to supply. Consequently, a continuation of the search for the outlying cemetery must remain one of the main objectives of any future Gawra expedition.

(2) The fact that graves and tombs contemporaneous with Strata XI-A through VIII occupy identical locations around temples, and are even found side by side (except in Stratum IX), is further proof that the tomb-builders were part of the population of those strata. No less important in this connection are the objects contained in Locus 181,

¹⁷ Building remains of Assyrian times also discovered on the plain surrounding the mound are described in *BASOR.*, 66, p. 18.

a grave below the Stratum XI Temple, which duplicate exactly certain tomb furnishings. Burial customs supply additional evidence to the same effect. Such features as contraction of the legs, orientation of the bodies, and position of the hands are almost identical in contemporaneous graves and tombs. Furthermore, the appearance of covered graves just before the initial occurrence of roofed tombs in Stratum XI-A must be considered another link between the two. Even a suggestion of the evolution of a specific type of grave into the tombs seems to have been furnished by graves of the *pišē* type, which are found only in Strata XIII through X, and are most common in Strata XIII through XI. The tombs themselves, as has been demonstrated in Chapter II, are not earlier than Stratum XI-A, so that a sudden metamorphosis limited to Stratum XII would seem implied by this theory. But the tombs of Stratum XI-A origin number no more than three compared to the twenty-four of Stratum XI, so that the evolution may be regarded as having continued through Stratum XI-A. The fact that among the twenty-four Stratum XI tombs there are four having elliptical and semicircular ground plans supplies another connection, for it seems to show that the evolutionary process had not yet been completed at the time of Stratum XI.

One important difference between the graves and the tombs may, however, be noted. Both are found around the locations of temples, or within their precincts, but the fact that graves are sometimes associated with private dwellings (as in Strata XII, XI-A, XI, etc.), must demonstrate the inferior social status of their occupants, and probably indicates that a magic (as opposed to religious) significance was sometimes attached to them.

(3) The fact that both tombs and graves have been found closely associated with numerous temples and shrines of various strata, although still other religious buildings are ignored by interments, is of some significance. In Table E, which follows, the concentrations of tombs and graves around or within religious and secular buildings of all strata have been listed.

To confine our discussion for the moment to religious edifices, it will be observed from the

TABLE E

	TOMBS		GRAVES		Total
	Around	Under	Around	Under	
<i>Stratum VIII</i>					
Western Temple (VIII-C only)	15	2	14 ^a	0	31
Central Shrine	3 [?]	0	0	0	3 [?]
Northern Shrine	0	0	0	0	0
Eastern Temple	1	3	0	4 ^b	8
<i>Stratum IX</i>					
Temple	4-7	2	1	1	8-11
<i>Stratum X</i>					
Temple	0	0	2 [?]	1	3 [?]
Shrine—Room 1003	1	1	0	0	2
<i>Stratum X-A</i>					
Rooms 20 and 21	0	2	0	2	4
<i>Stratum XI</i>					
Temple	21	3	22	8	54
Building in Square 5-Q	0	0	11	8	19
<i>Stratum XI-A</i>					
Round House	0	0	0	1	1
Temple	0	1	15	5 [?]	21 [?]
Building in Squares 5-M and 6-M	1 [?]	1 [?]	3	14	19 [?]
<i>Stratum XIII</i>					
Northern Temple	-	-	1	0	1
Central Temple	-	-	0	0	0
Eastern Shrine	-	-	2	5	7
<i>Stratum XIV</i>					
Stone foundations	-	-	0	3	3
<i>Stratum XV</i>					
House in Square 5-G (Rooms 3-9)	-	-	0	3	3
Large house in Squares 4-K and 5-K	-	-	1 [?]	0	1 [?]
<i>Stratum XVI</i>					
Frescoed building	-	-	0	0	0
<i>Stratum XVII</i>					
Northern Tholos	-	-	0	3	3
Southern Tholos	-	-	3	2	5
<i>Stratum XVIII</i>					
Temple	-	-	5	0	5

^a Including seven graves in Vol. I, pp. 141-142.

^b All described in Vol. I, pp. 142-143.

above tabulation that certain temples have large numbers of burials surrounding their locations or lying beneath their floors, while other temples have only a few interments associated with them, or none at all. Particularly interesting is the situation in Strata XIII and VIII, in both of which levels the mound was occupied almost exclusively by religious structures. The Central Temple of XIII has no burials whatever related to it; the Northern

Temple has but one, and the Eastern Shrine has no less than seven. The almost complete association of graves with only one of the three religious buildings constituting the Stratum XIII acropolis duplicates the situation encountered in Stratum VIII, where the Central and Northern Shrines together failed to attract more than three, and possibly no burials at all to their environs, while in contrast, the Western and Eastern Temples of the same

stratum together boasted of no less than thirty-nine. The same comparison may be made with other temples. The Temple of Stratum X, although probably related architecturally to the Western Temple of Stratum VIII-C, was featured by only three graves, compared to the eight to eleven of the Stratum IX Temple. On the other hand, the Temples of Strata XI-A and XI were the nuclei of cemeteries which together totaled seventy-five graves; this figure is even more remarkable when it is remembered that neither building was in use during the full period represented by its respective stratum.

We are, as a result, confronted with the problem of finding a reason for the heavy concentrations of both tombs and graves around and underneath the Western Temple of Stratum VIII-C; the Strata IX, XI, and XI-A Temples; and the Eastern Shrine of XIII. The only probable answer is that those temples were the seats of chthonic deities who, as the heads of a cult of the underworld and the dead, demanded human sacrifice of their worshippers. To be sure, not all burials associated with temples contain sacrificial victims. Only those burials which were excavated from within temples can be so regarded, but it will be noted from Table E that all temples featured by large cemeteries have a relatively high number of burials underneath their floors and walls. The graves and tombs located outside those temples presumed to have been the seats of chthonic deities undoubtedly contained persons who died a natural death. Possibly these were usually infants or children, because adults were reserved for the as yet undiscovered cemetery on the plain below, or there may even have been an underlying fertility idea, whereby childless women, by resorting to these sacred places, could have received the divine gift of pregnancy.

If an explanation granting a chthonic nature to the deities worshipped in the temples listed above is accepted, the cemeteries encompassing those edifices would be very natural adjuncts; conversely, the absence or isolated occurrence of burials around the locations of the Northern and Central Shrines of Stratum VIII, the Stratum X Temple, and the Northern and Central Temples of Stratum XIII would suggest that the divinities worshipped in those

buildings possessed different natures, and that their functions applied only to the living.

To extend our discussion to still earlier strata, the sacred character of the tholoi and their dedication to chthonic gods is firmly established by the heavy concentrations of graves around and within those circular buildings.¹⁸ Only three graves are specified in Table E as having been found near the two Stratum XVII tholoi, compared to five within them, yet it is reasonable to assume that an additional eighteen graves of Stratum XVIII origin are to be related to those buildings, for all of these were discovered in a small sector measuring no more than 20 x 20m. which was dominated by the tholoi.

The Stratum XVIII Temple is unique (if the doubtful burials associated with the Central Shrine of VIII and the Northern Temple of XIII are excluded) in having no graves beneath its location, although a small cemetery lay outside its walls. This may be explained as a difference in cult practice; at least, it is difficult to interpret this temple as the abode of a chthonic deity. But the validity of any conclusions regarding this building is challenged by the fact that the source of our information is only a small sector of the mound, with the southern corner of this temple as well as the area to the west of it still unexcavated.

In regard to the association of graves with secular buildings, this practice is apparently followed in all strata, but is particularly marked in Stratum XII, where almost every building had a burial, usually of an infant or child, beneath its floors or walls. Almost all large or important dwellings in other levels were so characterized, but notable exceptions are the frescoed building of Stratum XVI and the large house in Squares 4-K and 5-K of Stratum XV. As in the case of the temples, the heaviest concentrations of burials around and within specific secular buildings are to be noted in Strata XI and XI-A, but the reason for the increased importance of the mound as a necropolis in these strata and in Stratum XII is obscure. With this in mind, however, the association of only a single grave with the

¹⁸ Cypriote and Arpaehian tholoi are likewise characterized by burials; cf. P. Dikaios, "New Light on Prehistoric Cyprus," in *Iraq*, Vol. 7, Part 1 (Spring, 1940), p. 74, and *Ar.*, p. 34.

Round House of Stratum XI-A is remarkable. This negative evidence may logically be construed as suggesting that the unique structure in question was a fortress, rather than a fortress-temple, but it is not conclusive proof, for we have learned that buildings which unquestionably possessed religious functions were, in some cases, likewise unable to attract burials to their environs.

(4) It is a fact of some importance that large groups of graves of Strata IX and X origin were concentrated on the eastern edge of the mound, for both strata were distinguished by temples in dominating, central locations. There is no apparent reason why graves could not have been closely associated with the Stratum IX Temple, for except at the west and southeast no buildings or pavements existed to prevent graves from being situated close to its walls. As a matter of fact, the shafts of most of the tombs contemporaneous with Stratum IX were excavated close to the walls of the temple, being concentrated to the northeast and east, or precisely in those areas where graves have not been discovered. Does this imply that the open area to the rear of the IX Temple was reserved for tombs, and that the graves with their presumably socially inferior occupants had to be content with less desirable locations? The evidence from Strata XI-A, XI, X-A, and VIII contradicts such an assumption, for in all those strata the tombs and graves occupied identical areas; furthermore, two tombs (Nos. 169 and 170; cf. Plate XXII) occupy locations in Squares 6-J and 7-J in the eastern sector in which twelve graves of Stratum IX were found.

The presence of graves of Stratum XVI origin, as well as some of Stratum XV, on the same eastern sector is even more striking, for both settlements possessed other areas quite suitable for the location of graves, and no important religious edifices existed in this quarter of the mound. Although burials of Strata XVII and XVIII also occur on the eastern fringe of the tepe, the evidence from these strata is less definite, for excepting the complex of rooms in Squares 3-O and 4-O in Stratum XVII, those

two strata have been investigated only in the comparatively narrow limits of the sounding.

What the concentrations of graves on the eastern edge of the mound in these strata signifies is not easy to evaluate, for many complicating factors exist, such as, in Strata XV and XVI, the existence of large private houses in the same eastern sector, and the presence of scattered graves, unassociated with any buildings, in other parts of the mound in the present four strata. Nevertheless, it seems more than merely coincidental that almost all religious buildings of Strata XX through XI were located in the same area of the mound. It may be, therefore, that some of the inhabitants of Strata XVI, XV, X, and IX were deliberately interred on the eastern edge of the mound because of a tradition of sanctity of that region whenever cult practices, or the nature of the divinities worshiped, did not demand their location elsewhere. Thus, the Strata XV and XVI graves on the eastern edge of the mound not associated with definite structures may have been situated there because of the location of the tholoi of XVII, the temples of XVIII and XIX, and the tholos of XX, all of which lay almost directly underneath.¹⁹ But the same theory cannot account for the location of the eastern groups of graves in Strata IX and X, unless it is presumed that they were intended to be related to the Stratum XI Temple and to the XIII acropolis, for no later temples were situated in the same squares. Does the explanation lie instead in a superstitious belief in the East? Or was there, indeed, a tradition of sanctity concerning the eastern section of Gawra strong enough to span two or more strata? Many other examples of traditional conservatism are apparent in the town-planning, architecture, and material products of various Gawra communities, so that the present instance may only reaffirm its presence at Gawra in early times.

¹⁹ Cf. *Ac.*, p. 34: "Moreover, the (Halaftan) tholoi may well have kept a tradition of sanctity long after they had fallen into disuse, for there are even a few graves of the al 'Uhal period intrusive into them."

IV. POTTERY

(PLATES LXVII-LXXX; CIX-CLII)

In this survey of the ceramic material recovered from Gawra during the five campaigns between 1932 and 1938 the pottery will be described in its proper historical sequence, so that internal developments may be duly observed and noted, rather than (as with the architectural remains), in the order of excavation. To conform with this chronological arrangement, therefore, it will be necessary to begin with the pottery recovered from the two soundings adjoining the base of the mound, called Area A and Northeast Base, as it was in these areas that the earliest pottery was found.

A. AREA A AND NORTHEAST BASE (PLATES LXVII; CIX-CXVII, FIGS. 1-70)

In Chapter I it was observed that neither Area A nor the Northeast Base possessed any building remains, or showed signs of ever having been inhabited. They were instead open areas where some of the earliest inhabitants of the mound dumped the debris that had accumulated in their settlements. As a result, there were no clearly marked lines of stratification within these sounding areas, but six roughly separated levels of deposits could be distinguished in the refuse of Area A, which were designated by the letters A to F, with Level A being the uppermost and hence the latest. The Northeast Base sounding possessed no lines of division whatever in its deposits. Whenever possible, the level designations in Area A are given with the object descriptions so that some idea of relative age may be obtained, but the only satisfactory method of approach to a consideration of the pottery found in these areas is a typological rather than a chronological one. However, the small amount of pottery from the Well in virgin soil discovered in Area A will be discussed as a separate group in order to distinguish it from the pottery found in the debris overlying the Well, from which it was separated not only in archaeological context, but also in type and age.

I. Pottery from the Well in Area A (Plate

CIX, Figs. 1-9). The bottom of this Well yielded the four vessels shown in Figs. 1, 2, 5, and 8. Fig. 8 was decorated with a chocolate-brown wash on both surfaces, while the decoration of Fig. 5 was done in red paint on a cream-colored slip. Fig. 1 bore traces of a black wash or paint on its exterior surface; the remaining jar, shown in Fig. 2, is the only one of this group found at the bottom of the Well that is undecorated. The wares of all these vessels are of various shades of brown, and all are well levigated.

Figs. 6 and 9 were found between Burials C and D and almost in the center of the Well. The jar shown in Fig. 6 is of reddish-brown ware with a light cream slip and red-painted decoration. Fig. 9 is a large bowl of hard light-red ware having a buff slip on both surfaces and decoration in bistre paint. Above these, and about halfway up to the mouth of the Well, its fragments scattered among the bones of the twenty-one skeletons found at this point (Burial B), was Fig. 4, a jar of brown ware, the fabric containing white grits. On the exterior were traces of a greenish-gray (originally cream?) slip, and bistre paint. The decoration of this jar is similar to Fig. 51 from the area above the Well, but in all other particulars it more closely resembles Fig. 5. The jar fragment illustrated in Fig. 3 comes from the level of the topmost burial (A) within the Well and is of undecorated light-red ware. Fig. 7 is a fragment of what was in all probability a round-bottomed bowl, which was found above the burial just mentioned. This bears a brown-painted decoration on a wet-smoothed, drab brown ware.

II. Pottery from the Soundings of Area A and Northeast Base (Plates LXVII; CX-CXVIII, Figs. 10-70). The pottery from these two areas is grouped together since all of it belongs to a single variety typical of the so-called Tell Halaf period.¹

¹ Known chiefly through the excavations at Tell Halaf by Baron Max von Oppenheim, and by those conducted at Nineveh, Arpachiyah, and Tell Chagar Bazar by Mr. M. E. L. Mallowan.

This pottery represents, furthermore, the bulk of the evidence recovered at Gawra of this highly individualized culture, which is distinguished by the excellence of its ceramic industry, towards which both the potters and painters of those times contributed.

Despite the fact that the vessel forms are regular, all of this pottery is handmade, and even the use of the *tournette* may be doubted except possibly in the case of the thinner wares. Relatively few forms are employed. Two varieties of bowls, cups and chalices, squat jars or pots, and jars with high necks constitute the main types. There are no extremely large vessels, such as storage jars. The details of outline show a restricted use of handles, which usually take the form of conical lugs, and are most common on cooking pots and jars. One example of a ledge-handle was also found (Fig. 47). Only a single example of a spout was discovered, and this was on a miniature vessel (Fig. 70). The bases of all types of vessels are either flat or slightly concave; one exception, however, has a ring base (Fig. 23).

The wares are usually light red or reddish-brown in color. The clay was well levigated, and the fabrics are often thin. Tempering material was used to strengthen the clay of some of the larger vessels; very often this is in the form of white particles, which may be ground limestone. Extremely high firing temperatures must have been employed, since all wares are very hard and emit a ringing sound when tapped. The surfaces of most vessels were finished by the wet-smoothing technique or by the addition of a slip, usually light in color and presumably employed to give greater contrast to the paint.

Almost all vessels are painted. Due to vitrification produced in firing the wares, the paint is very often lustrous or glossy, and this characteristic forms one of the outstanding features of this group of pottery. The painting is both monochrome and polychrome, but two colors is the maximum employed on any of the vessels. The colors commonly used include red, brown, black, and bistre.

The painted designs are with few exceptions geometric or linear; when naturalistic patterns do occur, they are invariably representations of birds. The *bukranium* motif is found on a very few examples,

always in a stylized form. Aside from these, there is a wide variety of geometric and linear patterns which the painters of the Halaf period were expert in combining to form their characteristically complex and beautiful designs.

Bowls with Rosettes and Other Center Designs (Plates CX-CXIII, Figs. 10-24). This extensive group of bowls bearing center designs on their interior surfaces constitutes one of the outstanding types of Halaf pottery. These vessels bear four varieties of center design, of which the first is formed by *bukrania*. Only one complete *bukrania*-decorated specimen was found, which is illustrated in Fig. 10. The stylization of the *bukrania* on this bowl is duplicated on other specimens bearing this pattern, with no examples of a completely naturalistic *bukranium* design having yet been recovered; cf. Plate LXVII.b, Nos. 1-3. The decoration of No. 2 of that plate is apparently a combination of *bukrania* and *mouflon* patterns, while No. 4 illustrates the only certain example of the latter design. No. 3 has the same decoration on both surfaces, and seems to represent a highly stylized form of *bukrania* within stippled bands, the latter being a typical Halaf motif.

The second type of design found on these bowls is composed of a central rosette surrounded by intricate geometric patterns which cover the entire interior surface of the vessel. One of the most striking examples of this type is illustrated in Fig. 11, where the rosette is subordinated to the rest of the admirably balanced design.² It should be noted that this is the only specimen where the patterns of the concentric bands encircling the rosette are broken across the diameter of the bowl. The paneled quatrefoil design is found in two of these bands, but in each case they occupy only half of the circumference, and are opposed to each other. The remaining half of each is filled in with a checkerboard pattern overlaid with crisscross lines. In our drawing the polychrome decoration of this bowl is conventionalized, with solid black representing the original red paint, and with hatched lines indicating brown paint, so that the design is actually bolder than it would seem from our illustration.

² This bowl, together with a rosette-center bowl (Fig. 16), and a jar (Fig. 56), were found with the seal impression illustrated on Plate CLXVI, Fig. 123.

Fig. 12 has an elaborate rosette of thirty-two petals, the shape of the stems forming a second, smaller rosette. The polychromy of this vessel is indicated in our drawing by open boxes containing the letter B referring to bistre paint; otherwise the decoration is in red. The rosette of Fig. 13, from Level D of Area A, is of interest because of the manner in which the painter emphasized its petals. The cream slip with which the interior surface was covered was reserved around the petals, which were then outlined in bistre paint, the result being an extremely effective color contrast. The remainder of the surface of the bowl is cross-hatched, giving the rosette even greater emphasis. Fig. 14, also from Level D, does not compare artistically with any of the designs already discussed, since the painter in this instance depended for effect merely on the bright reddish-brown paint he employed. Fig. 15 (found between Levels D and E in Area A) is noteworthy because the rosette is formed of reserve ground, the petals being outlined by straight lines radiating from the center. The dot-filled bands encircling the rosette are also to be found on the exterior surface. Brown paint was used in decorating this bowl, which had been broken and repaired in antiquity as shown by two holes bored through its wall. The bowl shown in Fig. 16 has a large and elaborately decorated rosette. The three rows of dotted circles above it are, like stippled bands, a common pattern on these wares (cf. Figs. 25 and 40, also Plates LXVII.b, Nos. 15 and 16, and LXVII.a, No. 16). The entire interior decoration is in black, but the two inner bands on the exterior were formed by brown or faded red paint, represented in the illustration by cross lines. Fig. 17 was found with the jar shown in Fig. 62. The design on this bowl is not as full as that of previous examples, the rosette in particular having been simplified to a small, four-petaled figure. Although the decoration is polychrome, red paint was used only to form the two wavy lines on the interior surface, the remaining decoration having been done in bistre.

The third type of center design is illustrated in Figs. 18 and 19. Both the impaled circles forming the rosette of Fig. 18, and the lines of connected dots of Fig. 19 represent wide departures from the con-

ventional rosettes illustrated in Figs. 11-16 and may be later styles, although Fig. 18 was found in Level D of Area A. Fig. 18 is also noteworthy for the absence of the complicated encircling patterns found on other specimens, the extensive open area of light-brown ware provided as a background for the stylized rosette forming its only attraction.

The four-pointed central figures on Figs. 20-24 comprise the fourth and last class of center motifs. The basis of this design in Figs. 20-22 is the Maltese cross, but with the four members of the cross drawn so closely together that a thin, reserved line in the paint is the only means of separation. In Figs. 23 and 24, on the other hand, even those lines are lacking, and the result is a Maltese square whose sides are formed by inverted quadrantal arcs.³ Fig. 20 differs slightly from Figs. 21 and 22 in having reserved lines in the form of a quatrefoil within the cross. The encircling bands of Fig. 21 are full of the detail so common in the painted decoration of this period; those of Figs. 20 and 24 are comparatively simple. The bands of lozenges on Fig. 23 have been encountered on other specimens, but have never before been granted such prominence. More remarkable, however, is the depth of this bowl, and its pronounced ring base—the only one to have been found in either Area A or the Northeast Base.

Before passing on to a description of other kinds of vessels it should be noted that certain variations in shape are present in the center-decorated bowls. Thus Figs. 10, 17, 19, 22, and 24 have rounded walls over flat bases, while Figs. 14, 15, and 18 have much wider bases and flatter sides. It cannot be merely coincidental, however, that the bowls bearing conventional rosettes such as Figs. 11-13 and 16 have the best outlines. The graceful shape of these wide bowls, with their small bases, slightly carinated walls, and flaring rims is entirely in keeping with the strikingly beautiful designs applied to their surfaces. Thus the elements of form and decoration, in addition to technical excellence, combine to produce what must be considered, despite their antiquity, as ceramic masterpieces.

Other Bowls (Plates CXIII-CXIV, Figs. 25-

³ Similar designs are found on some seal impressions from much later strata; cf. Plate CLXI, Figs. 61-64.

33). The members of this group, although relatively few in number compared to those specimens bearing center designs, nevertheless include examples with exterior decoration only, as well as some painted only on the interior as in the preceding group. The same lack of homogeneity may also be observed in their shapes. None of the present bowls possesses the carinated outline reserved for those bowls bearing the finest center designs; instead, four different shapes may be distinguished. The first of these is represented by Figs. 25 and 28. These two bowls seem to be closely related to the bowls described under the preceding heading both in shape and in the fact that they bear interior decoration. Fig. 25 provides another example of the dotted circle pattern encountered previously in Fig. 16. In this case, however, it covers the entire inner surface, and is done in bistre paint. This vessel, which bears an interesting potter's or owner's mark incised on its base in the form of a W, had been repaired in antiquity, as shown by three pairs of holes bored along the ancient break. The painted decoration of Fig. 28, from the Northeast Base, is also noteworthy. The pattern of concentric semi-circles on its interior finds its only counterpart in Fig. 53, and seems to have been intended to frame a center design which, however, is lacking.

Figs. 26 and 27 constitute our next variety. Two additional bowl fragments from Levels E and F of Area A bore the same decoration as Fig. 27 (which was found in Locus G36-158, a grave in Level F), and possessed the same outlines, so that the type is probably early. This shape is featured by a wide, flat base and short, straight sides. The painted design of Fig. 27 is likewise crude, and appears to be a copy of a basketry weave rather than a true decorative design. The decoration of Fig. 26 is unusual in that it disregards the contours of the vessel to which it is applied, depending more on broad, sweeping effect than on fine detail (cf. Figs. 253 and 255 from Stratum XII).

Figs. 29 and 31 possess identical outlines and form the third sub-type. The pattern of Fig. 29, from Level D of Area A, is of interest because it introduces the double-axe motif that is later popular. The decoration of this bowl and that of Fig. 31,

also from Level D, show points of correspondence in the empaneling of the patterns, in the use of wavy fill-in lines, and in shape. On both black paint was used. The base of Fig. 31 is missing, but it was probably round, or slightly flattened as in Fig. 29. Plate LXVII.a, No. 3 shows a fragment of a similar vessel with identical decoration.

Figs. 32-33 illustrate the last variety, featured by concave bases, and flat, vertical sides. Such a form obviates any interior decoration, and these bowls are consequently decorated only on the vertical sections of the exterior, except for a simple band on the inside of the rim. Fig. 32 bears black and brown paint and Fig. 33 red and brown. In both drawings the brown is indicated by hatching.

Fig. 30 is an unpainted bowl from the Northeast Base. It is made of crudely shaped reddish-brown ware and is atypical in all respects, although a parallel is provided by Fig. 8, from the Area A Well.

Cups and Chalices (Plate CXIV, Figs. 34-43). Cups are illustrated in Figs. 34-38 and are of two types, the first being represented by Figs. 34, 35, and 38. These are characterized by wide, flat bases and nearly vertical, rounded sides, so that they might also be termed deep bowls. Their small size, however, almost certainly indicates their use as drinking vessels. Figs. 34 and 38 are painted, the former in purple and dark brown, the brown paint being represented in the drawing by hatched lines. The second variety of cup presents no terminological difficulty, for the shape of Figs. 36 and 37 permits no other description, and the pronounced central rib or carination indicates that they were intended to be held in the hand. An unillustrated duplicate of Fig. 36 was discovered in Area A. Both were made of hard light-brown ware, with white tempering material and wet-smoothed surfaces. The exterior of Fig. 37 bears a cream slip, but like the other members of this type is otherwise undecorated.

All specimens of chalices, which are characterized by a high, hollow foot, were found in Area A, and may be classified into two different groups. The first is represented by Figs. 41 and 43. Fig. 41 is carefully decorated in red and black paint; an unillustrated specimen identical in shape and decoration was found with it in Area A. Fig. 43 is quite

small and is simply decorated, although the interior of the bowl is lightly burnished, perhaps to render it less porous. The second type of chalice (Figs. 39, 40, and 42) is known only from fragments, but these are fortunately numerous enough to enable reconstruction of their shape, which is less primitive than the type just described. The bases of chalices of this type are again hollow (Figs. 39 and 42), but are not as high as those in Figs. 41 and 43. Moreover, the bowl of the chalice shown in Fig. 40 has incurving, rather than rounded sides. This kind of chalice seems to have been extensively decorated, and to judge from the extant specimens, both the bowl and the foot of the vessel were covered with painted designs. The quatrefoil pattern of Fig. 39, the dotted circles of Fig. 40, and the Maltese crosses of Fig. 42 suggest that some of the best patterns in the repertoire of this period were reserved for these chalices, which appear to be restricted to the latter half of the period represented by the deposits of Area A, for Fig. 40 was found in Level A, and Fig. 42 in Level C.

Pots (Plate CXV, Figs. 44-49). This is one of the least common types of vessels found in the Halaf deposits of Area A and the Northeast Base. Only six specimens are illustrated, all of which (except Fig. 47) exemplify the usual pot form characterized by squat bodies, short necks, somewhat flaring rims, and flat bases—a shape that is altogether suggestive of a stone prototype. A few additional fragments of similar pots were found, but the type is rare compared to the much more numerous bowls and jars. Although undecorated examples like Figs. 47 and 49 occur, these pots are usually painted, but the best designs and the painter's best efforts seem to have been reserved for other vessel forms. It would appear, therefore, that this class of pottery was a household type marked by inferior quality.

Fig. 47 is a cooking pot from Level D of Area A. The ledge handles on this vessel are unique, for although eight long lug-handle fragments were found in the same sounding, these may have come from jars rather than pots. The present specimen is devoid of decoration except for a light burnishing of the exterior surface which, however, was probably done to restrict the porosity of the clay.

Jars (Plates CXV-CXVII, Figs. 50-62). This

large class of vessels is remarkably homogeneous in form. There are, to be sure, exceptional shapes such as Figs. 52 and 59, but all other specimens fall into two groups, which are differentiated only by a difference in neck outline, and in the presence or absence of lug handles. The most common type of jar (Figs. 50, 51, 53-55, and 57) has a flat base, not disproportionately wide, with a more or less globular body. The neck is, as a rule, rather wide at the base, and expands further to a flaring rim. This type appears to be later than the members of the second group, illustrated in Figs. 56, 58, and 60-62. Those jars either have globular bodies (Figs. 61 and 62) or are piriform in outline, with high shoulders (Figs. 58 and 60), but their distinguishing characteristics are their straight, cylindrical necks, and the pierced lug handles set upon their shoulders.

The painted decoration of both types of jars covers the shoulder and a little more than half of the body, ending well above the base, and just below the point of greatest diameter. Necks are decorated in bands (Figs. 54-58), in reserved bands (Figs. 53 and 60), or in solid color (Figs. 61 and 62). The colors used in decorating these vases is usually a red or a reddish-brown, but Fig. 55 is done in black, and Fig. 58 in bistre. Only two make use of contrasting colors; red and brown in the case of Fig. 60, and black and brown on Fig. 56. None of the patterns employed on these jars is unusual, with the obvious exception of the naturalistic decoration on Figs. 61 and 62. Those two jars are remarkable for their combination of geometric and naturalistic designs alternately disposed in triangular panels, and they are among the most distinctive examples of ceramic art dating to this remote age yet found at Gawra or elsewhere. That these jars were made by the same potter and decorated by the same painter is extremely probable, for there are many points of correspondence between them. The only major difference between the two is to be found in one of the bird panels of Fig. 61 (each jar has a total of ten panels, five geometric and five containing bird figures), where the birds are depicted with wings outstretched, and a different kind of bird (possibly bustard?) seems to be represented. Both jars possess at least one

panel where the birds in the bottom row are shown with their heads turned back, and in one bird-panel of Fig. 61 two star-shaped figures were inserted in the background. In this same panel a single bird in the row next to the bottom holds a snake in his beak. In all other details of decoration and shape, however, the two jars are identical. Both specimens are made of a wet-smoothed buff ware of good quality. The paint used on Fig. 61 is reddish brown, showing black where overlaid; that on Fig. 62 is dark red, gone black.

Fig. 59 is much smaller than the jars of more orthodox shapes, but its decoration is similar to that of Figs. 61 and 62. It is, unfortunately, too incomplete to determine the original number of panels, which may have been either two or three, but it has the same alternate bird and geometric panels, the geometric design being identical with that of Figs. 61 and 62. The decoration is of a burnt sienna color; the ware is a well-baked gray, with a drab brown slip on both surfaces. A fragment of a jar of similar shape was found in the Northeast Base sounding, but this bore a geometric design only.

Fig. 51, from Level D, has the same shape as other jars of our first type, but the method of decoration is unusual. The entire exterior, except for a horizontal reserved band near the base, was covered with brown paint vertically overlaid at equally spaced points to form three groups of five lines each. These lines extend from the base of the neck to the reserved band above the base. This decorative scheme is almost identical with that of Fig. 4, from the Area A Well, but the effect is quite different. The ware is also unusual, being light green in color.

Miniature Vessels (Plate CXVIII, Figs. 63-70). These may have been toys, or may have had some limited practical use, but they constitute a class that is of no great typological importance, and require little comment. Fig. 65 has its entire exterior covered with red paint. Fig. 66, a small pot, is the most interesting of the group because of its basket handle. Three similarly handled vessels were discovered in occupational layers of the mound (Figs. 160, 225, and 323), but these are all much later in date, having been found in Strata XV, XIII, and XII, respectively. The purpose of the two

diagonal piercings through the base of Fig. 69 is obscure. Fig. 70 originally possessed a channel spout.

B. STRATA XX-XVII
(PLATES LXVIII-LXXV; CXIX-CXXIII,
FIGS. 71-121)

These four levels are of considerable interest, since they represent the earliest period reached on the mound itself, and consequently mark the starting point of our survey of the pottery recovered from the occupational strata of Gawra. The wares include no less than three main types: (I) polychrome decorated wares of the Tell Halaf type similar to those encountered in Area A and the Northeast Base; (II) a class of coarse, undecorated pottery; and (III) a variety of monochrome-painted pottery quite different from the Halaf wares previously discussed. The unifying architectural element of this group of levels, the tholoi, is thus apparently opposed by dissimilar pottery types; however, pottery of the Halaf type which we should expect to find with the tholoi is present in all four strata, so that there is actually no contradiction in the evidence presented by these levels.

There are, naturally enough, certain interstratigraphic differences within the present group. The pottery of Stratum XX, for example, is entirely of the Halaf variety with only minor exceptions, but in Strata XIX through XVII the Halaf wares lose their preponderance and are found in far smaller quantities. The undecorated, coarse pottery constituting our second type attains some popularity in Strata XX and XIX, but is almost completely superseded in Strata XVIII and XVII. Finally, the monochrome-painted wares that occur only as scattered sherds in Stratum XX quickly become predominant in XIX, and retain their popularity through Stratum XVII. As a matter of fact, this class of painted pottery is found in ten consecutive strata, and is thus the most complete record of this period yet discovered. Despite the introduction of this ceramic type, with its own characteristic wares, shapes, and monochrome-painted decoration which we shall designate by the term "Obeid," the Halaf tradition as exemplified by the tholoi and by its characteristic pottery persisted into strata above XX, and it is for this reason that we must consider

Strata XX through XVII as a unit rather than as a series of unrelated levels.

I. *Halaf Wares* (Plates LXVIII.a, LXX.a; CXIX, Figs. 71-74). In regard to the Halaf pottery from these strata, an examination of our illustrated specimens discloses that although it belongs without question to the same ceramic family encountered in Area A and the Northeast Base, there are numerous and pronounced differences. The most common forms now include the cup illustrated in Fig. 74, from the Tholos of Stratum XX, and by No. 18 of Plate LXVIII.a. Several additional examples were found in Strata XX-XVIII, all of them characterized by the small disc base found on our illustrated specimens.⁴ These vessels have no counterparts in the pottery from the two soundings at the base of the mound. Another popular vessel is represented by Fig. 72 from Stratum XX (cf. No. 38-13-999 described in the Appendix to this chapter). A number of fragments of this type of shallow bowl were discovered in Stratum XIX and in XVIII as well, which probably represents a debased form of the center-decorated bowls found in the soundings (cf. Fig. 18 from Area A). Fig. 73 is the sole representative of its type, distinguished by its sharply carinated outline, well-baked ware, and carefully painted decoration. The only similar vessel yet found at Gawra is shown in Fig. 122, and was discovered in Stratum XV.⁵ Fig. 71 was produced by Stratum XX, and is remarkable for its depth and ring base; in both of these particulars it resembles Fig. 23, from the Northeast Base.

With the exception of the bowl just described, none of the Halaf vessel forms from the present strata is duplicated in the pottery from the soundings at the base of the mound, and the same dissimilarity may be noted in painted decoration. The cobweb center design of Fig. 71, for example, is probably a simpler, more stylized form of the earlier rosettes, while the base design of Fig. 72 must be

a crude attempt at rosette decoration. The cross-hatched semicircles of Fig. 71 and Nos. 3 and 13 of Plate LXVIII.a, as well as Nos. 7 and 15 of Plate LXXI.a are a new and common pattern. The so-called "dancing men" motif of No. 16 of the latter illustration is unique in our material.

The lustrous paints of the Halaf pottery from the soundings at the base of the mound are almost completely lacking in the present strata of the mound, which can only indicate a deterioration of technique. Polychromy is still common, even though many of our examples are decorated in a paint of a single color. One sherd was found which bore its main pattern in red paint, with white being used to emphasize details of the design. The wares are still hard and are comparable in quality to those from Area A and the Northeast Base, although a tendency to thicker fabrics may be noted in the smaller vessels.

II. *Undecorated Wares* (Plates CXIX-CXX, Figs. 75-82). This type of pottery, which is found in larger numbers in Strata XX and XIX than in the two upper levels of the present stratigraphic unit, never predominates in any one stratum, but occupies a position of secondary importance to painted pottery, whether of the Halaf or Obeid types (cf. the similar coarse, undecorated wares from Area A; Plates CXIV and CXV). The wares are usually thick, although hard and formed of well-levigated clay. They are most often light in color, buff shades predominating. The surfaces are rough and unfinished, and no slip was ever employed. Only two types of vessels occur, jars and bowls, of which the jar form is the most popular and may be divided into two types: large storage jars, and a smaller variety characterized by high necks. The latter is illustrated by Figs. 78 and 81, both from Stratum XVII, and by Fig. 79 from the Tholos of Stratum XX; the intermediate levels of XIX and XVIII yielded additional unillustrated specimens. An undecorated jar of the present type, from a grave below Stratum XVIII, may be seen in Plate LXXII.a, No. 7. Fig. 78 has a shape that is suggestive of the earlier Halaf-type jars from the soundings. Figs. 80 and 82, from Strata XVIII and XIX, respectively, illustrate the storage-jar type. The latter, which contained an infant burial, has a piercing through the

⁴ TG., Plate LXII, Figs. 6 and 8 illustrate two similar cups with polychrome decoration recovered from earlier trial trenches on the slopes of Gawra. The attribution of these vessels to Stratum XIV (*ibid.*, p. 39) is now to be revised to Strata XX-XVIII.

⁵ They are, however, much more common at Arpachiyah; cf. *Ar.*, Fig. 63, No. 1 for a specimen identical in all particulars with our Stratum XIX bowl.

shoulder to form a spout, while Fig. 80, which was found in the southeast corner of the Stratum XVIII Temple, is featured by a pair of pierced lug handles.

Figs. 75-77 illustrate the undecorated bowls, which usually have wide, flat bases and nearly straight sides. All are from Stratum XVIII, Fig. 77 having been found in the temple of that level. A duplicate of Fig. 77 was yielded by Stratum XIX which is unillustrated. Fig. 76 formed part of the funerary equipment in Locus 7-66, a burial of an adult and child (Plate LXIII.a). It is deeper and has walls that are more rounded than the other undecorated bowls; in addition, it possesses a disc base. Fig. 75 bears deeply incised, concentric circles on the interior surface of its base, and additional fragments of similarly grooved bases of bowls were found in this group of strata; e.g., cf. No. 7 of Plate LXX.b. Such incisions cannot be described as an attempt at decoration since they are too crude and irregular, but they may have served some household purpose such as grating.⁶

III. *Obeid Wares* (Plates LXVIII.b-LXIX, LXX.b-LXXV; CXX-CXXIII, Figs. 83-121). One of the chief reasons for the importance of Strata XX through XVII is the fact that during the period represented by those levels a new cultural period was inaugurated, the so-called Obeid period. The distinctive monochrome pottery produced in this period has been found in Stratum XX, but only in the form of isolated (probably intrusive) sherds; beginning with Stratum XIX, however, it becomes more common than the Halaf wares.

Only a few types of vessels are found, with bowls and jars predominating. The bowls (all of which are round-based) may be divided into three categories, viz., bell-shaped, hemispherical, and those with interior rim decoration, or with incurving rims.

⁶ Mention should be made of a very few sherds discovered in Strata XX and XIX bearing incised decoration, usually in bands of chevrons, which may prove to be more plentiful in still earlier levels. These sherds recall the similarly decorated wares of Nineveh I (*AdA.*, Vol. XX, Nos. 1-4, Plate XXXVI), and Samarra (*AMI.*, Vol. V, Plate XL, Nos. 253, 254, 262, 271, 272; Plate XXXVI, No. 239). It should be noted, however, that the Gawra sherds from Strata XX and XIX bear incised decoration only, uncombined with painting. Only a single sherd from Stratum XVI had both punctured and painted ornamentation; cf. Plate LXXVII.b, No. 8.

Jars are of two kinds, one having squat bodies and short necks, the other being characterized by high, narrow necks. Long, "boat-shaped" scoops and lenticular jars with high spouts complete the list of vessel types.

Details of these shapes show that handles are more common than in the earlier Halaf type of pottery. These usually take the form of pinched, horizontally pierced lugs (Plate LXIX.a, No. 5; the long tubular handle on No. 4 of the same illustration is the only specimen of this type found), and are most frequently encountered on jar shoulders. Small jars are often spouted, but the spouts are of the simplest kind, consisting merely of a piercing through the shoulder of the vessel (cf. Plates LXIX.a, No. 1, and LXXIV.a, No. 6). It will be observed that these spouts are characterized by a thickening of the shoulder around the opening, but true, extended spouts are found only on the lenticular jars.

From a technical standpoint, the Obeid wares represent a sharp decline from the finely made pottery of the Halaf period. The clay is coarser, sometimes even gritty, with large white particles frequently showing on the vessel surfaces. Wares are still well baked, although not as hard as those of the earlier period. There is little wet-smoothing or employment of slips to finish off surfaces, although vessels so treated are not entirely unknown. The wares are usually buff, light brown, green or greenish-gray in color; the latter are always well baked. Red and reddish-brown fabrics are now completely absent.

Particularly in the painted decoration is the technical inferiority to Halaf pottery most marked. The lustrous, baked-in paints of the preceding period have no counterpart in Obeid decoration, which is dull, often flaky, and always monochrome. Brown, black, and red are the colors most frequently employed. The fine, detailed designs of Halaf painting, of which there was such a large and diversified number, strongly contrast with the comparatively uninspired, roughly done patterns found on the Obeid wares. The repertoire of patterns is now composed to a large degree of linear and curvilinear forms, but geometric designs are not infrequently used. The most common motifs are ladders, rows of chevrons, arrows, circles, wavy lines, cross-hatched

bands, triangles, bands of vertical zigzag lines, dotted lozenges, and Maltese crosses or circumscribed crosses. Naturalistic decoration is limited to exceptional portrayals of birds (Plate LXXIV.b, Nos. 5 and 12), fish (Plate LXXV.c), and the human figure (Plate LXXV.a and b).

Thus, while Obeid wares are decorated with a smaller number and variety of patterns, those that are employed include several that have already been encountered on Halaf pottery. For example, cables, impaled circles, double axes, checkerboards, scales, stippling, and circles surrounded by rings of dots are all designs that have been carried over from the earlier ceramic variety. It is interesting to note, however, that those most common on Halaf pottery, namely rosettes, bukrania, quatrefoils, bands of connected dots, dotted circles, and the stylized Maltese cross and Maltese square either fail to survive into Obeid times, or are found only exceptionally on wares of that period. Only the simpler and more mechanical motifs are repeated on the later wares, while the few new patterns introduced do little towards raising the artistic level of the decoration, and include little more than vertical zigzags, combs, bands of chevrons, pairs of pendant triangles, ladders, arrows, and paneled circles and dots.

Obeid painting does, however, bring with it a conception of artistic design quite different from that represented on Halaf pottery. The entire surface of each vessel is no longer required to be completely covered with decoration; instead there are broader, simpler designs (often paneled) of fewer strokes and patterns, which depend not so much on repetition and the close association of differing designs as on the combination of open background and painted decoration. This simplification of style may have been one reason for the substitution of monochromy for polychromy, since only the full designs and complex patterns of the Halaf wares would have necessitated the use of two or three contrasting colors. Be that as it may, the abandonment of the Halaf style of painting and its replacement by a simpler style only achieves a result that is artistically inferior for, to take an obvious example, the bowls with rosette centers are unequaled in artistic effect by any products of the Obeid painters.

Bell-Shaped Bowls (Plates LXXIII.a and d,

LXXV.a and b; CXX-CXXI, Figs. 83-92).

These are featured by a profile which is double-curved, and is best described as bell-shaped, and by their rounded bases which are decorated either with a painted ring, as in Figs. 83, and 86-91, or more exceptionally with a solidly colored circle, as in Fig. 92. Figs. 84 and 85 show uncommon specimens with undecorated bases. A sub-variety of these bell-shaped bowls is represented by Figs. 89-92, from Strata XIX through XVII. These possess a distinctive kind of painted decoration, which may possibly recall sewn leather prototypes. Testifying to the popularity of this variety of bowl are the many fragments illustrated on Plates LXVIII.b, LXIX.b, and LXXI.b. The decoration on these bowls always consists of two opposite pairs of long triangles, based at the rim of the vessel, each pair being separated from the other by one or two wavy lines (Fig. 89), a cross-hatched line (Fig. 90), cables (Fig. 91), or lines of chevrons (Fig. 92), extending from the rim to the base. The triangles in each pair are connected by a cross-hatched band (Figs. 89 and 90), cross-lines (Fig. 91), or are sometimes left separated, as in Fig. 92. The pattern lines on this sub-type of bowl are, therefore, vertical rather than horizontal, as is the case with all other bowls whether bell-shaped or otherwise.⁷

It should be noted that the interior decoration so characteristic of Halaf bowls is not found on Obeid pottery in the present group of strata or, in fact, in any levels before XII. That this is not entirely due to changes in bowl forms is borne out by the fact that all of the bell-shaped bowls now under discussion are quite capable of showing interior decoration, yet they are painted on their exteriors only. Figs. 89-92 illustrate one possible reason. These bowls were obviously meant to be viewed when in an inverted position, for their decoration would otherwise not be visible (cf. Plate LXXIII.d = Fig. 89). Cf. also Plate LXXV.a, where the human figure is represented with his head towards the base of the bowl.

⁷ Bowls bearing this type of decoration are rare at Arpachiyah, being, in fact, represented by a single specimen (*Ar.*, Fig. 38, No. 2) which is said to come from a late phase of the Obeid period (*ibid.* p. 69). The skeuomorphic character of this design is explained quite differently by Mallowan (*ibid.* p. 64).

The rims of all bell-shaped bowls are decorated either with simple bands or with groups of pendant triangles such as occur on Figs. 83-85, all from Stratum XVII. The decoration of the bowl shown in Plate LXXIII.a is not unusual; cf. also Plate LXIX.b, No. 20, and Plate LXX.b, No. 6. This pattern, which is a survival from Halaf wares (cf. Plates LXVII.a, No. 16 and LXVII.b, No. 15), is restricted to the present stratigraphic unit, disappearing in strata overlying XVII. The rim decoration of Fig. 86, from Stratum XVIII, is not duplicated on any other bowl from the present levels. The ware of this specimen is thin and light green in color; the paint is bistre. The checkerboard design of Fig. 87 is also uncommon. Found in Stratum XVIII, the ware of this bowl is again light green, with the design in dark-brown paint.

Plate LXXV.a and b shows a bell-shaped bowl discovered near the Northern Tholos of Stratum XVII. The unique decoration of this vessel represents the earliest painted representation of the human figure yet found at Gawra. The scene is undoubtedly magical or religious, and may be intended to portray a ritual dance. However, the significance of the vertical line at the right towards which the man is advancing, with arms upraised, is obscure, nor is it clear whether the series of impaled circles to the right of the vertical line is symbolic or a mere field-divider. This impaled-circle pattern occurs on Halaf wares; cf. Plate LXVII.b, Nos. 6 and 7, and Fig. 7 from the Well in Area A. Unfortunately the vessel is incomplete, and we do not know what was portrayed on the missing half of the bowl, but it is possible that there was a similar human figure on the opposite side, which may have been separated from the extant figure by two series of impaled circles. The drawing of the human figure is crude, with the head barely depicted by a short, oblique stroke, but the artist's purpose was apparently to suggest motion, and in this he succeeded by showing the figure with knees bent, and with the ends of the skirt away from the body. The inverted position of the design on this and on other bowls has already been discussed above; the vessel is made of light brown ware, with dark brown paint forming the decoration.

Hemispherical Bowls (Plates LXXII.a, Nos. 1-

3; CXXI, Figs. 93-98). This common variety of bowl bears less distinctive painted decoration, the best patterns apparently being reserved for the more graceful bell-shaped bowls. Only one of the hemispherical bowls bears the painted ring found on the bases of almost all bell-shaped bowls. This exception, Fig. 97, was found in Stratum XVII, and is further distinguished by a short, straight line enclosed by the circle. This specimen is also of interest for the treatment of its rim decoration, where the two patterns of pendant triangles and zigzag lines are interrupted by blank spaces in the design. The same interruptions in the patterns are to be found on Figs. 83-85 and 95, and is a feature of the Obeid wares only, being unknown in Halaf painting.

Figs. 93 and 94, and Nos. 1 and 2 of Plate LXXII.a illustrate the usual decoration to be found on the hemispherical bowls which consists of simple straight and wavy lines. The cross-hatched triangles of Fig. 96 are notable for the care with which they were executed; this bowl was found near the entrance of the Northern Tholos of Stratum XVII. The cross-hatched band decorating the rim of No. 3 of Plate LXXII.a is also a common pattern. The decoration of Fig. 98, from a burial in Stratum XVII, is crudely applied, and is probably a variation of the pattern shown in Plate LXXIII.a.

Other Bowls (Plate CXXI, Figs. 99 and 100). This somewhat vague heading includes the few remaining bowls which cannot be described as hemispherical or bell-shaped. Fig. 99 is typical of several others which are slightly less than hemispherical in shape, but more characteristic of this group is the decoration of straight or wavy lines on the rim interior. These bowls are unknown in levels underlying XVIII, as are the bowls having rims which curve in, such as Fig. 100. Bowls with this profile are quite rare, the extant specimens from the present levels numbering no more than three or four, but the type persists into later strata.

Squat Jars (Plate CXXII, Figs. 101-108). All except Figs. 101, 105, and 107 were found in burials in Strata XVIII and XVII, and all are featured by squat bodies (sometimes carinated as in Figs. 104, 106, and 108), short necks, and splayed rims. Most of these jars are made of good light green wares, and the decoration is in brown or

bistre paint. The patterns employed include several that are typical of the wares of XX-XVII, such as the ladders of Fig. 103 (these occur in three groups), the stippling of Fig. 105, the vertical wavy lines of Fig. 106, and the bands of chevrons on Fig. 108. The carination, when it occurs, is usually at the middle of the jar; the high carination of Fig. 102 is exceptional and makes it resemble more closely Fig. 46 from Area A than the other members of this group. Fig. 101 was yielded by Stratum XIX; it is the largest jar of this type and is unique in possessing four large, pierced lug handles.

A sub-division of the squat jar group is represented only by fragments and is characterized by a rim that is horizontally ledged on the interior, this ledge being pierced vertically for drainage or suspension (Fig. 107). The bodies of these vessels may have been globular or carinated,⁸ but because of their short necks their typological connections are with the present group. The pronounced interior ledge was intended either as an anti-splash safeguard, or meant to support a lid. The necks of these vessels are always short, but sometimes have a vertical rim, as in Fig. 107, or a splayed rim as in Plate LXXIV.a, No. 20 (from Stratum XVII). Additional fragments may be seen on Plates LXIX.a, No. 10, and LXX.b, No. 12; we thus have samples of this form from Strata XIX through XVII, while additional examples were provided by Strata XVI-XV.

Jars with High Necks (Plates LXXII.a, Nos. 4-6, LXXII.b and c, LXXIII.c; CXXII, Figs. 109-111). The jars included under this heading have both squat and globular bodies, but share the common characteristic of high, narrow necks. The necks are usually vertical, but sometimes (as in Fig. 111, and in Plate LXXIII.c, No. 1) expand sharply to the rim. The turned-in rims of the jars shown in Plates LXXII.b and LXXII.c, both from graves in Stratum XVIII, are even less usual. The shape, as well as decoration, of Fig. 110 is primitive and may be restricted to Stratum XIX, for the only

jars having this profile were found in that level. Fig. 109 has a pointed base and two holes bored through the shoulder, only one of which shows in our drawing.

Three painted jars from Stratum XIX may be seen on Plate LXXII.a, Nos. 4-6. No. 4 has conventional outlines, but the solidly colored neck and absence of body decoration are exceptional. No. 5 of the same plate also has a solidly colored neck, but two bands decorate the body. Almost all of the painted decoration of No. 6 has worn off.

Lenticular Jars with High Spouts (Plates LXXIII.b, LXXV.d and e; CXXIII, Fig. 113). The singular shape of these jars, with their squat, sharply carinated bodies and high, obliquely set spouts make them the most distinctive vessel form produced by the potters of this phase of the Obeid period. Complete or nearly complete specimens number only three: Fig. 113 (=Plate LXXV.e), Plate LXXV.d, and Plate LXXIII.b. Of these, the first was found in a room adjoining the Southern Tholos of Stratum XVII. Fragments of additional specimens were found in all strata from XIX through XVII, some of which are shown on Plates LXIX.b (No. 24), LXXIV.a (No. 13), and LXXIV.b (No. 13). All these jars lack a neck or rim on the body opening, but possess a characteristic painted decoration, which always covers the entire upper surface of the vessel in solid color, leaving only reserved panels or lines for fill-in patterns. The jars shown in Fig. 113 and Plate LXXV.d each have four equally spaced panels extending from the body opening to the edge of the carination. The lenticular jar illustrated in Plate LXXIII.b, on the other hand, has only two such bands, filled in with combs, and connected by four horizontal pattern lines which encircle the central opening on the side of the body opposite the spout. The function of this obviously highly specialized vessel remains obscure; all were found in occupational debris rather than in graves.⁹

⁸ Cf., however, *Ar.*, Fig. 38, No. 1, for a complete vessel with this type of rim. The body of the Arpachiyah specimen is globular. Cf. also *AAA.*, Vol. XX, Nos. 1-4, Plate XLVII, No. 16 for another fragment, also from Arpachiyah, and *al-Ubaid*, Plate XVII, Nos. 1695 and 2024, and Plate XIX, No. 2168 for southern parallels.

⁹ Dr. L. Legrain, formerly Curator of the Babylonian Section of the University Museum, Philadelphia, has kindly called my attention to a sherd from Tell el-Obeid in the collections of the Museum. This is a fragment of a lenticular jar identical in shape with those from Gawra. The fragment is of typical Obeid ware, light green in color, the upper part of the vessel being decorated with bistre

Scoops (Plates LXXIII.e; CXXIII, Fig. 112). All examples, numbering no more than six, of this unusual vessel form were found in Strata XVIII and XVII of the present stratigraphic unit, but are known also from Stratum XVI (cf. Figs. 145 and 147). They are to be differentiated from bowls which have parts of their rims pinched to facilitate pouring, for these boat-shaped vessels possess a rectangular plan and U-shaped section; cf. Fig. 112. This peculiar shape would make them well adapted to scooping or similar operations, and they may have been used in that manner to obtain liquids or other substances from skins or any kind of large container.

Varia (Plate CXXIII, Figs 114-121). Model vessels form the majority of the miscellaneous objects grouped under this heading; these require no special comment, with the exception of Fig. 118, which is larger than the rest, and has two small lug handles. As it was found in a child's grave below Stratum XVII (Locus 7-69), it may have been a toy or the child's drinking vessel. Fig. 117 illustrates a cup of simpler shape from XVII. It is worthy of note that no true cup, chalice, or beaker form is found in the present group of levels, and the last two specimens described, together with the possible addition of Fig. 98, are the only ones which it is possible to describe as drinking vessels. Fig. 114 shows what was, in all probability, a lid or cover. It is oval in plan, and originally possessed a hollow projection on top which had been broken off in antiquity. This object came from Square 5-G in Stratum XVIII, adjacent to the Temple, but whether its use is to be related to that building is conjectural.

C. STRATA XVI-XV

(PLATES LXXVI, LXXVII; CXXIV-CXXVI,
FIGS. 122-166; CXLIX, FIGS. 444-459)

Three levels are included in this group, namely, Strata XVI, XV-A, and XV. The intervening layer of XV-A, which can best be described as a limited rebuilding of Stratum XVI, possesses no significance so far as the pottery is concerned, since no pottery vessels have been attributed to it by the

excavators in their field records. This is due to the fact that it proved impossible at the time Stratum XV-A was cleared to determine which floors and walls belonged to that occupation, and which to Stratum XVI. For this reason, therefore, no objects have been attributed to Stratum XV-A, and it follows that all objects found below the floors of Stratum XV have been designated as originating in XVI.

This necessarily arbitrary arrangement does not, however, affect in any degree the study of the pottery from these levels, as the wares found in them are uniform, with no major points of difference being observable in the ceramic products of Stratum XVI as compared to those of Stratum XV. Furthermore, the vessels found in the present levels continue, for the most part, the shapes, wares, and painted patterns of the Obeid pottery from the underlying four strata, while the amount of Halaf pottery has now dwindled to a mere handful of scattered sherds. The overwhelming preponderance of pottery of the Obeid type in these three levels and the absence of the characteristic Halafian tholoi prove without doubt that, in the period represented by Strata XVI-XV, the Halaf culture had definitely come to its end, while the sporadic occurrence of fragments of pottery of the Halaf type may be explained as intrusions.

Unpainted pottery is also found in the present strata, but it bears no relationship to the quite distinctive class of plain wares found in Strata XX-XVII, and is not to be considered as a separate class of pottery. On the contrary, it is in all likelihood a variety of household wares not deemed worthy of decoration, and is indeed technically inferior to the painted fabrics. Thus the pottery of Strata XVI-XV continues only one of the three ceramic types found in the underlying group of strata, but the surviving Obeid type is homogeneous throughout, and forms the link unifying the three strata.

I. *Halaf Wares* (Plates CXXIV, Figs. 122 and 123). Only one fragment of Halaf pottery sufficiently complete to permit reconstruction was recovered. This is shown in Fig. 122 and was discovered in the large building occupying Squares 4-K and 5-K in Stratum XV. The low carination of this vessel, as well as its hard, light-brown ware,

paint in solid color, broken only by narrow groups of parallel lines radiating from the rim to the carination, as on the Gawra specimens. The Tell el-Obeid sherd bears the Museum accession number 15738, and is unpublished.

and lustrous bistre-painted decoration, set it apart from the Obeid pottery with which it was found, and prove its origin in the Halaf period. Nevertheless, it is necessary to turn to Fig. 73, from Stratum XIX, for an analogy, which may serve to indicate how far this specimen, and all other Halaf pottery found in Strata XVI-XV, are out of their original context. Other small fragments of Halaf vessels found in these levels bear, as a rule, stippled and cross-hatched painted decoration. One sherd from XVI was stippled in white paint, while another (also unillustrated) had a polychrome hokranium design. One or two fragments of the cup-form characteristic of Strata XX-XVIII (Fig. 74) were yielded by Stratum XVI. The only remaining Halaf sherd worthy of note is a tiny fragment bearing part of the figures of two animals, possibly onagers (Fig. 123). These figures are excellently drawn in polychrome, red and black being the colors used.

II. *Obeid Wares* (Plates LXXVI-LXXVII; CXXIV-CXXVI, Figs. 124-166). In general, the Obeid wares from the present group of strata reveal a decline in quality when compared to the pottery of the same type found in Strata XX-XVII. This decline is manifested chiefly in a reduction in the number of shapes carried over from the lower levels, and in the painted decoration, which has become more stereotyped and superficial. No new shapes are introduced except for a cup form, nor are there any new painted patterns, and even though the technical quality of the wares is as good as formerly, we have clear indications that the ceramic products of the present levels are little more than static survivals of earlier types.

The shapes include bowls, cups, and jars, as well as the scoops known from Strata XVIII and XVII. There are thus a few types of vessels that have not been continued, among which the lenticular jars with high spouts, high-necked jars, and bell-shaped bowls may be mentioned. Spouts and handles are even less common than formerly, and the present strata produced only a few examples of the interior-ledged jar known in Strata XIX through XVII. All pottery continues to be handmade.

The wares themselves do not follow the trend of other ceramic elements, and are equal in all technical respects to their predecessors in the lower levels.

Brown and light brown are the usual colors of the fabrics, but green and yellowish green are frequent. Slips are not common, but were occasionally used, while many of the better vessels were finished by wet-smoothing.

Not only does the painted decoration lack the variety and, in many cases, the care in execution of the designs on Obeid wares from the underlying strata, but it is significant that there is present in Strata XVI-XV a large group of undecorated vessels. The ladder pattern (Figs. 147, 459; Plates LXXVI.a, Nos. 6-8; LXXVI.b, No. 13; and LXXVII.b, No. 9) represents an important survival, but stippled decoration, such as illustrated by Figs. 98, 105, and 116 from the lower levels is now completely absent. Dotted lozenges (Plate LXX.b, Nos. 4 and 10), the comb design (Fig. 111 and Plate LXXIII.b), and circles surrounded by dots (Plate LXXIII.a) are additional motifs which fail to survive into Strata XVI-XV. Naturalistic designs, while not plentiful in the lower strata, are now even less numerous, and are limited to three crude representations of birds (Figs. 444-446, all from Stratum XVI). Fig. 456, Plate LXXVI.a, No. 12, and Plate LXXVII.b, Nos. 1 and 3 have typical Halaf patterns, but the wares on which they are found are more characteristic of the present strata. Plate LXXVI.a, No. 9 shows a new variation of the Halaf cable pattern.

The crude execution of the decoration on Figs. 444-446, 451, 458, and on most of the sherds shown on Plates LXXVI and LXXVII further emphasizes the lower quality of the painting in the present levels. A few examples of new designs may now be noted; these may be forerunners of the sweeping change in the whole repertoire of decorative motifs which occurs in Stratum XIII. Thus none of the patterns illustrated in Figs. 446-454 and 457-458 has been encountered in strata discussed so far. In addition, No. 3 of Plate LXXVI.a, Nos. 5 and 7 of Plate LXXVI.b, and Nos. 2, 7, 12 and 13 of Plate LXXVII.b may also be regarded as examples of new designs. On the other hand, the filled-in ovals of Plate LXXVI.b, No. 17 are probably a degenerate form of the same design illustrated by No. 17 of Plate LXX.b, from Stratum XVIII. Fig. 455 is an example of the Samarra "step" de-

sign, while No. 8 of Plate LXXVII.b, which is covered with punctured and painted decoration, seems to recall that feature of the same southern fabrics. On all painted specimens from Strata XVI-XV, bistre is the favorite paint color, closely followed by red, brown, and reddish brown.

Bowls (Plate CXXIV, Figs. 124-136). The most common bowl form in Strata XVI-XV is slightly more than hemispherical, and is characterized by a contracted rim, thus forming a slight, sloping shoulder. Bases are always rounded. The typical members of this group are illustrated by Figs. 124-127, 129-131, 133, and 134. Figs. 124 and 125 are unpainted, but the latter has a cream slip on its exterior. The remainder are cursorily decorated, with the exception of Fig. 134, which has an outline not unlike the cups shown in Figs. 137-139, but is larger and not quite so deep. Figs. 132 (from Locus 7-6, a grave in XV) and 136, from Stratum XVI, are the only open bowls from these levels and may be related to similar bowls from Strata XX-XVII. On the other hand, Fig. 132 is also identical in shape and decoration with Fig. 241, from Stratum XII, although the colors of ware and paint differ. Fig. 128 (XVI) has an unusual triangular rim plan, making it well adapted for pouring. The shape of Fig. 135, from XVI, may have been borrowed from stone bowls (cf. Plate CLXXXI, Figs. 86 and 90), for it is unlike any pottery bowl yet described. The ware of this specimen is a coarse gray; the surfaces are treated with a red wash or slip.

Cups (Plate CXXV, Figs. 137-144). This, the only new type of vessel introduced by Strata XVI-XV, is composed of several sub-types, none of which was found in substantial numbers. The most common variety is represented by Figs. 137-139. Their bases are more pointed than round, and the rims contract. Figs. 140 and 141, both from XV, illustrate a type having similar incurving rims, but with flat bases; they are either undecorated, or possess only simple painted bands. Figs. 142-144, all from Stratum XV, are isolated examples of their respective types. Fig. 142 is unpainted, and is made of black ware with a rough brown slip. Fig. 143 has both its surfaces completely covered with black paint, which is also found on the exterior of Fig. 144. Fig.

143 may be related to the beakers of Stratum XIII (cf. Figs. 203-206), and is possibly intrusive from that stratum, as it was found near the edge of the mound.

Jars (Plates CXXV-CXXVI, Figs. 148-159). The majority of these are characterized by globular bodies, rounded bases, and wide necks with splayed rims. Fig. 148 bears the most striking design to be found in any of the painted decoration from these levels; it was, moreover, executed with meticulous care in bistre paint. The shoulder of this jar is decorated with four painted panels, two of which contain circumscribed Maltese crosses separated from each other by two cross-hatched panels. Surrounding each circumscribed cross is a circle of reserved ground, in turn enclosed by a painted square and bordered, on each side, by a broad vertical band again of reserved ground. The result is an effective color contrast between the buff-colored ware of the vessel and its bistre decoration. The neck is completely covered with paint, while below the panels was what may have been a broad band of solid color, further emphasizing the shoulder design. Fig. 149 is of almost identical shape, but this specimen lacks the paneled design of Fig. 148, being decorated merely by a broad, cross-hatched band that covers the shoulder, if not the entire vessel. Both jars were found in Square 4-G, near the small house of Stratum XV, and both are incomplete. Fig. 157 has the same wide neck and splayed rim of Figs. 148 and 149, but has a high, flat shoulder. From Stratum XV, it is covered with lustrous red paint on the exterior surface and on the interior of the neck, and is made of well-baked light-red ware. Fig. 151, from XV, is one of the few jars having a flat base. Of wet-smoothed, chocolate-brown ware, the decoration is in bistre. Note the reserved cable pattern. Fig. 152 was found in Square 6-E, next to the frescoed building of Stratum XVI. The ware of this vessel is very gritty, the surfaces exhibiting many large white particles. Fig. 153 may be a potter's reject. Made of coarse, although extremely hard green ware, it is warped and fissured perhaps through over-firing. The paint is a crudely applied bistre; more remarkable are the two loop handles connecting rim and shoulder. Probably originating in the present group of levels is Fig. 154,

which was discovered in dumped earth. The sharp carination is a feature of Strata XX-XVII jars, but its flat base, overhanging rim, and painted decoration point instead to the present strata.

Figs. 156, 158, and 159 have squat bodies and wide necks. Only Fig. 159 is decorated, and all are formed of coarse, crudely shaped clay.

Scoops and Pots (Plate CXXV, Figs. 145-147). Only two examples of the boat-shaped scoops encountered in Strata XVIII and XVII were yielded by Stratum XVI, and they are completely unknown in XV. Both specimens were made of yellowish green ware, and are decorated in bistre paint. Fig. 147 has a carefully drawn ladder pattern.

Somewhat arbitrarily we have included under this heading Fig. 146, from Stratum XVI, the only pot found in these levels. It is the largest vessel from these three strata, and may have had some function connected with the manufacture of pottery, for it was discovered in Square 4-J, next to the large kiln of XVI.

Miniature Vessels (Plate CXXVI, Figs. 160-166). Fig. 160 is basket-handled, like Fig. 66, from Area A. Figs. 161 and 162 are carefully decorated (an unusual feature for miniature vessels) and resemble in shape the larger jars from these levels. Fig. 164 may be a model of a larger vessel, for its lugs would serve no purpose on a jar of such small dimensions. Fig. 165 is probably the bowl of a small ladle or spoon; a projection, which may have been the handle, is now missing. Fig. 166 is an unusual spouted vessel of rough gray ware.

D. STRATUM XIII

(PLATES LXXVIII.c AND d; CXXVII-CXXXII, FIGS. 167-234; CL-CLI, FIGS. 460-513)

Stratum XIV, which is architecturally represented by the low stone foundations of a single building, has had, like Stratum XV-A, no pottery or other artifacts attributed to it. A few scattered sherds were found at the level of the stone foundations, but because the Eastern Temple of Stratum XIII had been constructed directly upon the earlier building remains, the excavators could not undertake the task of attributing those sherds to one stratum or the other. All objects found between XII and XV, consequently, were regarded as having their

origin in Stratum XIII, and in our survey of the pottery from the Gawra occupational layers we must, accordingly, proceed now to a description of the ceramic products of that stratum.

In a stratum so transcendently distinguished by the excellence of its building remains, it might be expected, perhaps, that the ceramic products of such superb architects and builders would at best maintain the level of craftsmanship previously reached in Strata XVI-XV. This modest expectation is exceeded by the pottery from Stratum XIII, for that period has produced some of the best wares, both in technical and artistic respects, that have been encountered since the Halaf age. Nor is a sharp cultural cleavage to be deduced from a comparison of the pottery of the preceding group of levels with that of Stratum XIII. To be sure, some important differences may be noted, and there are many new vessel forms and painted designs which differentiate the wares of XIII from those of earlier and later strata. Nevertheless, the excellent products of the Stratum XIII potters belong to the same family of monochrome-painted fabrics which have been found in Strata XIX through XV.

Stratum XIII is the first in which wares of the Halaf type are completely absent. Undecorated vessels are about as proportionately common as before, but as in Strata XVI-XV, they cannot be considered a separate ceramic variety. As might be expected in a level occupied by public buildings rather than by dwellings, the amount of pottery recovered is not large, and as a result many types of vessels are represented by only a few specimens. The main vessel forms are now bowls, spouted pots, beakers, cups, and jars; of these, the form most distinctive of Stratum XIII is the beaker.

Most of the bowls fall into two rough classes. The first resembles the hemispheroidal bowls of Strata XVI-XV, but has a narrower mouth and a more pronounced shoulder; the second has a simpler outline, with rounded base and sides. One bowl, for the first time since the Halaf period, was decorated across its interior. Others possess ring bases, the first occurrence of this feature, except for the isolated specimens illustrated in Figs. 23 (from Area A) and 71 (from Stratum XX).

The jars produced in Stratum XIII are of many

varieties, most of which are represented by isolated specimens. The scoops of the lower strata are now unknown, but an incense burner was found, the earliest yielded by Gawra.

All vessels are handmade. Some increase in the use of slips (usually cream or buff in color) and wet-smoothing may be noted. Burnishing appears on a number of examples, not as a means of decoration, but to render some of the poorer quality wares less porous.

The wares now tend to green and greenish-gray colors, culminating the gradual shift to green fabrics begun in Stratum XVI, but light brown, brown, and red wares are still found. All wares are well fired, the green variety being particularly hard. A diminishing use of the white tempering material popular heretofore is noticeable in Stratum XIII. Black and bistre are the favorite paints, but sepia, brown, and red are by no means uncommon. The green wares usually bear black or bistre painted decoration; on brown wares the color is more apt to be a darker shade of brown, or red.

The individuality of the pottery of Stratum XIII is best exemplified in its painted decoration, where a whole influx of new patterns may be noted, strongly contrasting to the limited and overworked repertoire of decorative designs found on the ceramic products of the underlying strata. In order to illustrate these more fully, particularly since many of them are not to be found on complete vessels, some selected designs have been charted on Plates CL-CLI, Figs. 460-513. The impressive variety of these patterns is incontrovertible testimony to the force of the renaissance of the Obeid culture that took place in Stratum XIII. The same effect may be observed in the glyptic evidence and in the architectural remains; moreover, it is surely not coincidental that the continuous history of copper at Gawra begins with this stratum. In Chapters VI and VIII the evidence of stone objects which suggests new contacts with eastern regions at the time of XIII is reviewed, and it is hardly surprising, therefore, that this painted pottery should show affinities with the same regions. While this volume is concerned only with the internal evidence presented by Gawra, it may not be considered out of place to call attention to the obvious cultural connections of Stratum XIII

with the Eastern Highlands. These connections are especially marked in the painted designs on pottery, and numerous parallels and analogues could be cited from Tepe Hissar, Sialk, Tepe Giyan, Tell-i-Bakun A, and other Iranian sites. Naturally enough, our present designs are also related to those appearing on wares from Arpachiyah, Nineveh, Samarra, and el-Obeid, but the most numerous and the closest relationships are with Iran, which must have been the source of the revolutionary changes apparent in all the products of the inhabitants of Stratum XIII.¹⁰

New decorative techniques further distinguish the wares of Stratum XIII, illustrated by some specimens bearing ribbed, incised, and appliqué decoration. Such examples are, however, comparatively few in number, indicating that the new techniques did not seriously rival painting as a means of ornamentation.

Bowls (Plates CXXVII-CXXVIII, Figs. 167-186). The most popular type of bowl is a variety resembling the round-based, hemispheroidal bowls of Strata XVI-XV, but with a smaller mouth and characterized by a flat, sloping shoulder (Figs. 167-170). The painted designs of these vessels are usually simple and not well-executed. Fig. 173 may be included in this type because of some similarity in body form, but it differs in possessing a ring base. This is a feature of other XIII vessels as well (Figs. 189 and 197) and becomes extremely common in Strata XII-A and XII. Fig. 172, on the other hand, has similar outlines, but a flat base.

A second, less well-defined variety of bowl has a hemispherical shape composed of rounded base and sides (Figs. 174, 175, 177, and 182). The only one of these vessels requiring comment is Fig. 182, whose Maltese cross decoration marks the first occurrence of interior decoration on bowls, other than at the rim, since the Halaf period.

Figs. 171 and 183 have roughly approximate outlines; both possess a slight contraction below the rim, and in this respect have some resemblance to the beakers of the present level. Fig. 171 is, however, too large to have been a drinking vessel, and is, moreover, undecorated.

¹⁰ Cf. *BASOR.*, 66, pp. 11-13; *CSEL.*, Fig. 13, and pp. 36-39.

The remaining bowls have no common characteristics, and each is the sole representative of its type. Fig. 179 is one of the largest vessels yielded by Stratum XIII, measuring forty centimetres in diameter. It is further distinguished by its straight sides and flat base.¹¹ Figs. 176, 181, and 185 have burnished surfaces. Fig. 181 was found in the Long Room of the Eastern Shrine, and seems to have been intended as an imitation of a stone vessel. Not only does the shape of this bowl, with its thick, rounded sides and small disc base resemble stone vessels, but a sandy black clay was employed, which was then burnished to complete the resemblance. Fig. 184 is the first member of an unusual ceramic family to come to our attention. Made of light-brown ware, with a thick brown slip on both surfaces, and decorated with black paint in a sprig pattern, it is typical in all of these details of a large group from Stratum XII. The base of Fig. 184 was probably rounded, not flat as reconstructed in the illustration (cf. Figs. 243-245). Fig. 180 is a large deep bowl or pot with an interior-ridged rim such as was noted on some jars of Strata XX-XVII (Fig. 107), and found less commonly in Strata XVI-XV. This type of rim is rare in Stratum XIII, and the present specimen undoubtedly represents one of its last survivals, since it is unknown in overlying strata. Fig. 185 is of brown ware with a burnished red slip; this bowl, which was found in the Well, and Fig. 186 are the first spouted vessels to have made their appearance since the lenticular jars of Stratum XVII. Additional spouted vessels from Stratum XIII may be seen in Figs. 221, 222, and 224.

Cups (Plate CXXVIII, Figs. 187-194). The cups of this stratum are similar to those of Strata XVI-XV in their characteristics of rounded sides and contracted rims, but the present specimens have flat instead of rounded bases, and are not so deep. An even closer parallel is provided by cups of the Halaf period found in the soundings at the base of the mound; cf. Figs. 35 and 38. The missing bases of Figs. 188 and 190 may have been

flat, or rounded as reconstructed. In general, the cups are not unlike some of the bowls from this level, particularly those shown in Figs. 167-170, but the cups are smaller and lack the carination and flat shoulders of those bowls.

The unusual treatment of the zigzags of Fig. 187 and the complicated pattern of Fig. 190 are done in red paint; as is the rule in Stratum XIII, when a color other than black is employed, the ware of both vessels is light brown. Fig. 193 is the only undecorated member of this group and is quite small. Found in the Long Room of the Eastern Shrine, it contained a few white paste beads. Fig. 192 is the only cup yielded by the Well. This vessel is small—almost miniature in size—and possesses a round base. The decoration is simple, the whole exterior being covered with bistre paint, with a narrow band reserved at the rim. Both Figs. 189 and 194 are isolated examples of their types. The former has a well-fired, thin fabric, but is irregular in outline, as is Fig. 194, which may have been used as a drinking vessel, or have served as a lid.

Beakers (Plates CXXIX-CXXX, Figs. 195-209). The most distinctive, and one of the most common ceramic products of the present level are the beakers illustrated in Figs. 195-209, of which Figs. 195, 196, 203, and 206 were found in the Well. These graceful vessels are found only in Stratum XIII, and constitute the first important ceramic type to be introduced since Strata XX-XVII.¹² They are, in general, characterized by gently curved or recurved sides, and a rim that usually flares. Three different profiles may be noted, however, of which the most common form has recurving sides, as in Figs. 200 and 203. A simpler variety (Figs. 195 and 196) has a flat base, and slightly curved sides expanding to a wide rim. The last type is marked by sharp body carination just above the base as in Figs. 197 and 202. Bases are rounded as in Fig. 203, flat (Figs. 196-198), slightly pointed (Fig. 202), or footed (Fig. 197). The same lack of uniformity applies to size, for the smallest beaker (Fig. 198) measures only 65mm. in height and 78mm. in width at the rim, while

¹¹ Although represented by a single specimen at Gawra, this straight-sided variety of bowl was common at Arpachiyah where they were the largest painted vessels in the Obelid period. Cf. *Ar.*, Fig. 32, and p. 46.

¹² Beakers were also found at Arpachiyah; cf. *Ar.*, Fig. 31, nos. 5 and 6; Fig. 31, no. 10, and Fig. 36, nos. 1 and 2.

the largest specimen (Fig. 203) is well over three times that size.

All beakers were carefully made of thin fabrics. Green, reddish brown, and brown are the usual colors of the wares, and all are well baked. Many had secondary surface treatment by wet-smoothing, or by the addition of slips. The latter are always light in color, cream and buff being the favorite shades.

Dark colors predominate in the painted decoration, but this is a preference that is evident on other types of Stratum XIII vessels as well. Bistre, black, and brown are the most common paints, in order to contrast with the light-colored wares and slips. The designs are not as repetitive as one might expect in a single group of vessels, and they afford further proof of the versatility of the Gawra painters of this age. Geometric patterns are most usual, and two different styles of painting may be noted. In the first, the paint is used to block out the background, the lines of the pattern being left reserved, as in Figs. 199 and 204. In the second, more conventional style, the pattern is outlined in paint as in Figs. 200 and 206. A few designs require comment: the reserved, curvilinear pattern of Fig. 199 is tectonic in character, while the elaborately embellished zigzags of Fig. 200 exemplify a style for which there are no Gawra parallels, with the sole exception of Fig. 500, also from Stratum XIII. The latter motif was found on a beaker identical in shape to Fig. 200, and is especially noteworthy for the fact that the decoration was made in polychrome, red and black being the colors employed.

Fig. 204 has the most striking decoration found on any vessel in Stratum XIII, and may even be regarded as one of the most beautiful ceramic products of any period. Admirably balanced, and well adapted to the contours of the beaker to which it was applied, the design suggests a comparison with the triangular windows and long, vertical grooves to be found on the incense burner from this stratum illustrated in Fig. 228 (=Plate LXXVIII.d). As these features on the incense burner are obviously intended to reproduce certain architectural details found on some Stratum XIII building (cf. p. 144), it is not improbable that we have in the central decoration of this beaker a

stylized representation of an entrance to one of the temples forming the XIII acropolis, or even a façade of one of those edifices. In this connection, the fact that this beaker was found in a pit under the Long Room (No. 2) of the Eastern Shrine is not without added significance.

Figs. 203-205 are identical in profile, and are all decorated with groups of vertical lines which find their simplest form on Fig. 205. The decoration of Fig. 206 seems to be closer to that of Stratum XII fabrics than any from the level under consideration; the entire lower part of this vessel, which was found in the Well, is missing. Compare the patterns on Figs. 256, 264, 286, 305, and 306, all from Strata XII-A and XII.

Figs. 207 and 208 lack the grace of the other beakers, their sides are straight, and the walls of Fig. 207 are much thicker than is usual. Possibly both beakers represent a decadent form, for Fig. 208, at least, was found in an oven sunk into the Northern Temple.

The shape of Fig. 209 is also somewhat unusual, for although it has a bell-shaped profile similar to most other beakers, it is wider and shallower than other specimens. The decoration, however, is in the reserved technique employed on Figs. 199 and 204 of the present group.

Jars (Plates LXXVIII.c; CXXX-CXXXI, Figs. 210-224). Almost all specimens illustrated are single examples of their respective types. The principal jar form found in Strata XVI-XV is represented by only one specimen from the present level, shown in Fig. 212. Figs. 210 and 211 show some resemblances, and this neckless, shouldered form is also notable because it has some similarity to the wide-mouthed pots of Strata XII-A and XII. The prototype of this shape is the interior-ledged jar of Strata XIX-XVII; cf. Fig. 107. In other particulars, however, even Figs. 210 and 211 are dissimilar, for Fig. 210 is about five times the size of the other and is decorated, while Fig. 211 is plain. The impaled circles on Fig. 210 are a motif common on Halaf wares. Fig. 213 illustrates a new type of jar whose outstanding feature is a pair of loop handles connecting the shoulder and rim. Two additional loop-handled fragments were found in XIII, one of which is shown in Fig. 223. Fig. 214

may be an out-of-place specimen. An original source in a stratum dating to late Halaf or early Obeid times seems to be indicated by both the paneling and the patterns of the painted decoration, as well as by its squat, sharply carinated body and wide neck. This jar was found at the edge of the intrusive pit in Stratum XIII, which may suggest the means by which this vessel was removed from its original context. The ware is buff, flaking off easily; black paint forms the decoration.

Fig. 216 is an interesting newcomer; its long, flat, sloping shoulder, body carination, and short neck are a combination hitherto unknown. There are numerous parallels to the painted design, however, of which we may note Fig. 474 from Stratum XIII, and Plate LXXVII.b, No. 15, from Stratum XVI. This jar was found in a rifled burial of a unique type (Locus G36-148) near the Northern Temple.

Figs. 217, 218, and 220 are distinguished by their ribbed and incised decoration. Fig. 217 has a simple chevron and herringbone pattern incised on both surfaces of the neck, and on the upper part of the body, but lacks the heavy corrugations of the other two jars, while its neck is wider and expands to the rim. Figs. 218 and 220 (=Plate LXXVIII.c) are closely related in shape and in a decorative technique which is so elaborate that it seems to represent a fully developed style. Of these, Fig. 218 has the more precise and extensive decoration. The entire exterior surface, as well as the rim interior, is deeply ribbed except for a small spot on the base, and a small reserved band at the rim. Within the horizontal grooves is a secondary decoration consisting of small punctured holes on the neck, and light diagonal incisions on the upper part of the body. The decoration of Fig. 220 (=Plate LXXVIII.c) follows the same style and presents the same general appearance, but here the secondary decoration is simpler, and is composed only of diagonal incised lines which form rope patterns extending in horizontal rows from rim to base. The interior surface of the neck has shallower, vertical flutings, while the base is decorated with an incised, coiled, rope pattern that, as in Fig. 218, leaves only a small area in the center undecorated.

An interesting new type of jar is shown in Fig. 221, found in the Well. This is featured by two

necks set obliquely on a globular body, and is apparently the prototype of the similar double-necked form found in Strata XI-A and XI (cf. Figs. 356 and 434).

Figs. 222 and 224 are additional examples of spouted vessels, already encountered in Figs. 185 and 186. Fig. 222 is made of coarse cooking-pot ware, with a mottled and faintly burnished exterior surface, while Fig. 224 is made of green ware.

Incense Burner (Plates LXXVIII.d; CXXXII, Fig. 228). Not only is this object outstanding as the earliest example of this kind of cult object yet found at Gawra; it is even more notable for the decoration it bears, for this incense burner possesses decorative features that are duplicated only in the architecture of the Stratum XIII acropolis, and embodies others that must have been present in missing portions of the temples. To enumerate these features, we have in the incense burner (although incomplete, enough was recovered to enable restoration) a more or less bell-shaped object, with a horizontal ledge near the top, from which it contracts to what was probably a narrow opening. The interior was completely open, and lacked the interior divisions sometimes found in this class of cult objects, but there can be no doubt that it was used as an incense burner in connection with temple ritual, for it was found in the Long Room of the Eastern Shrine. What is more interesting, however, are the seven doors in its base, each surmounted by a triangular window, each combination of door and window being separated from its neighbors by a pair of deeply grooved vertical lines. Since it possesses windows and doors, therefore, this object was undoubtedly fashioned after some architectural model, and the only buildings in Stratum XIII on which vertical architectural decoration have been found are the three temples, whose niches could best be represented in clay by grooves. The overhanging ledge surmounting the object may reproduce the eaves of the building, and while there is no other evidence to suggest the presence of windows in any of the Stratum XIII buildings, the triangular openings of the incense burner make such an assumption entirely reasonable. The similarity between the design of the beaker, Fig. 204, and the present object has already been discussed above. Two other objects, the footed ointment vessel from Stratum XII shown on Plate

XCV.d, No. 2, and the bone fragments illustrated on Plate CLXXXII, Figs. 9 and 10 bear similar designs (cf. pp. 208 and 215).

Varia (Plate CXXXII, Figs. 225-227, 229-234). Miniature vessels are represented by only two specimens, Figs. 232 and 233. Fig. 225 is another example of the basket-handled pot already known from Area A and Stratum XV. The drop-shaped object shown in Fig. 229 may have been employed as a vessel or may have been made for some other purpose; its ware, a poorly baked brownish black, with fissured surfaces, gives no clue to its precise function.

More interesting, although also problematical as regards its interpretation, is the hoof-shaped pot, Fig. 231, found near the two ribbed jars shown in Figs. 218 and 220. It is formed of two compartments, the cleft on the exterior and bottom being filled in with bitumen, while the whole exterior surface, except the base, is covered with paint of a burnt-sienna color. The upper part of this object is missing. The fact that this vessel is divided into two sections may indicate its employment as an ointment pot, but this interpretation does not explain its peculiar shape, nor the bitumen applied to it. A similar object was found in Stratum XII, shown in Fig. 326.

The remaining objects included under this heading call for little comment. Fig. 226 comes from the northern edge of the mound and is the earliest funnel found at Gawra. The inside surface is lined halfway to the rim with bitumen. Fig. 227 is a section of drain pipe found with fragments of other sections, some only 80mm. in length *in situ* in Square 5-K, where they were presumably used to drain off the main court of the acropolis. Fig. 230 is another piece of drain pipe found near the intrusive pit in Square 4-M. Fig. 234 is a fragment of a large, possibly spouted vessel; it is remarkable for its appliqué and incised decoration, which apparently shows the sun, with radiating rays, and the crescent moon. Below are two conical projections, or breasts, set above a curved, moulded band with incised decoration. We may have here a hint of the worship of a sun- or moon-goddess, but it would be imprudent to form such an assumption from a single sherd. Another sherd (unillustrated) was found in the main court of the acropolis. This was covered on

both surfaces with appliqué scales, and may have been a decorative architectural piece originally placed on one of the temples.

E. STRATA XII-A AND XII

(PLATES LXXVIII.a AND b, LXXIX.e AND f;
CXXXIII-CXL, FIGS. 235-327)

The pottery of Stratum XII-A, like its building remains, is negligible in quantity and importance compared with that of Stratum XII, representing, in all likelihood, a short transitional period between XIII and XII. In describing the architectural remains of these strata in Chapter I, it was observed that some portions of the sub-stratum of XII-A remained in use during the period covered by XII proper, while still other portions had been removed in antiquity to provide room for some of the later buildings of XII. With such complicated stratigraphy, therefore, it would be difficult to separate the pottery of these levels, especially in view of the fact that all of it belongs to the same class of Obeid¹³ painted wares that have been found in all strata since XIX. Furthermore, while some slight differences may be noted in fabrics of XII-A and XII,

¹³ It should be noted that the Obeid wares of Gawra are not as homogeneous as the name would lead one to expect. In Strata XII-XIII, for example, green wares and ring bases are characteristic, as well as a distinctive type of painted decoration. Strata XV-XVI were the source of another ceramic variety, related to the wares of XVII-XIX, but of inferior quality. The pottery of Strata XVII-XIX represents a third sub-type, with its own typical forms, details and decoration which betray, at the same time, other influences. A less inclusive term than "Obeid" for the wares of Strata XII through XIX would thus have been preferred, but to make such distinctions in the nomenclature and text of this monograph would mean extending its scope far beyond its prescribed limits. Consequently, the whole group of wares from Strata XII through XIX, whose unifying element is its monochrome painted decoration, has been described here merely as Obeid.

The relative position of the Samarra wares in Mesopotamian prehistory has yet to be fixed decisively, although it seems probable that they were contemporaneous with some phase of the Halaf period. While there are some echoes of Sammaran motifs on the early Obeid wares from Gawra, those wares had best be distinguished from the orthodox Samarran type. Cf. Speiser, "Closing the Gap at Tepe Gawra," *SR.*, 1939, pp. 442 and 443; and "The Beginnings of Civilization in Mesopotamia," in the Supplement to the *JAO.*, No. 4 (Dec. 1939), pp. 19, 20, and 24. See also McCown, *CSEL.*, p. 35, footnote 44, and Table II, column I; also Braidwood, "New Chalcolithic Material of Samarran Type and Its Implications," in *Journal of Near Eastern Studies*, Vol. III, No. 1 (Jan. 1944).

the paucity of the ceramic material from Stratum XII-A makes any lengthy or detailed comparisons impossible. As a result of these factors, the pottery of both strata is considered here as a group.

Strata XII-A and XII are the last levels characterized by painted pottery to come within our survey. Stratum XII is also the first level to contain pottery in such abundance that a wide variety of types and sub-types may be distinguished, each represented not by isolated specimens, but by ample numbers of vessels. This tremendous increase in the amount of pottery recovered is due in part to the large number of graves found in the present strata, of which the vast majority were urn burials of infants or children. However, a definite increase in the amount of pottery found in occupational debris may also be noted. Probably pottery came into wider use at this time as a result of technical improvements in the method of manufacture, but it must also be remembered that Stratum XII was an extensive settlement which undoubtedly contained a larger population than the mound had ever supported previously.

The pottery of this group of levels, and particularly of Stratum XII, is composed of the largest number of types of vessels yet encountered. Consequently, while the emphasis in the underlying strata has been on decoration rather than vessel form, this has now shifted, and greater interest now attaches to the shapes of the vessels. The main kinds of vessels found include bowls, beakers and other drinking vessels, pots, and jars. In these levels large vessels, particularly pots and jars, are extremely popular. Bowls may be classified into three groups according to the type of base they possess. Thus we have (1) a relatively small group of round-based bowls; (2) a large category of ring-based bowls of various shapes; and (3) another small group having flat bases. The first is an early type found in XII-A, and in the earliest phase of XII, while a sub-type is composed of the imported "sprig"-decorated wares, of which one specimen was found in Stratum XIII. Ring-based bowls are the most common, and constitute one of the most typical products of the Stratum XII potters. The flat-based bowls are of heterogeneous shapes and are, furthermore, undecorated, thus indicating that they are forerunners of the bowls com-

mon in overlaying strata. Open bowls are once again painted on their interior surfaces in the first common occurrence of this feature since the Halaf period.

Although there are only a small number of drinking vessels, these include cups, beakers, and chalices. No single one of these types, however, identifies itself so closely with these strata as did the beakers in Stratum XIII. Pots may be divided into five groups; with these, as with jars, the criterion for classification is the profile of the vessel, rather than the type of base. All are large, and many were used as the containers of infant burials. The five types include: (1) U-shaped pots with vertical or expanding sides; (2) U-shaped pots with slightly contracted rims; (3) pots with carinated bodies and long, sloping shoulders; (4) pots with globular bodies; and (5) spouted pots. Jars are less precisely described as small and large; of these, the latter are more numerous. Bottles, funnels, and miniature vessels complete the catalogue of shapes.

Among these vessel types are several that have been continued from the underlying levels, particularly the round-based bowls with small, flat shoulders. These appear to represent the chief difference between the ceramic products of XII-A and XII, for they seem to be common in XII-A, but occur only sporadically in XII, and thus emphasize the transitional nature of the lower stratum. Other XII-A—XII vessel types known in underlying strata include pots with sloping shoulders, as well as some small jars with high, wide necks. The bell-shaped beaker characteristic of Stratum XIII is now unknown. Spouts occur with the same infrequency as before, but the outstanding feature of the pottery of the present strata is the ring base, which is found on all types of vessels. The forms most characteristic of XII-A and XII are the deep U-shaped pots with rounded bases and flat, overhanging rims, ring-based bowls, and large storage jars.

The wares continue to be handmade, but there is now a much wider employment of the *tournette*, or slow wheel. Coarse, thick fabrics are now common. The large white particles frequently used in lower levels as a tempering material are now almost completely unknown, and sand seems to have been substituted as the *dégraissant*, for many of the wares are gritty in texture. Peculiar to these strata are

many vessels (of green ware, as a rule) with cracked or crumpled walls, or with distorted shapes. These are the result of imperfect firing, and are invariably associated with graves, probably because they constituted a class of cheap potter's rejects. Green wares are the most common, but some light brown and reddish brown fabrics persist. All wares are well baked, and some, particularly the green variety, had been subjected to such high firing temperatures that they are nearly vitrified. Secondary treatment of the surfaces is common; the brown-colored wares often bear slips, while those of the green variety are often wet-smoothed.

There is in these levels a notable increase in the amount of undecorated pottery, continuing the trend towards plain wares already noticed in Stratum XIII. Nevertheless decorated vessels are by far the larger group, and the decoration is of the same monochrome type encountered on the wares of all underlying strata since XIX. A new type of painted ware makes its appearance in Stratum XII, characterized by a brown or brick-red slip, and decorated in black paint in a curious sprig-like, or "stitched" pattern. U-shaped pots, small jars, and small, shallow, round-based bowls are the vessels—undoubtedly imported—having these unusual attributes.

In regard to the patterns found on the painted wares of XII-A and XII, most of these consist of repetitious geometric and linear designs such as triangles, wavy lines, cross-hatched bands, etc. Very few of the motifs introduced in Stratum XIII are now in evidence, and little of the originality expressed in the painting of Stratum XIII. To relieve this gloomy picture of artistic retrogression, we have two vessels on which the painter placed original designs; these outstanding examples of artistic unorthodoxy may be seen in Figs. 280 (=Plate LXXIX.e) and 309 (=Plates LXXVIII.a and b). In addition, there are, as in Stratum XIII, a few specimens bearing ribbed and incised decoration.

Bowls (Plates LXXIX.f; CXXXIII-CXXXV, Figs. 235-265). The first type of bowls to be considered are those having round bases (Figs. 235-245). Fig. 236 is representative of several others marked by a high shoulder and contracted rim. Related to this, but with lower body carination, are Figs. 235 and 237. All specimens excepting Fig.

237 were found in the occupational debris of Stratum XII-A, and are probably a transitional type. The bowl shown in Plate LXXIX.f is of the same carinated variety but has a rolled rim, and is, furthermore, one of the most excellent products of the Stratum XII potters. A minor group of round-based bowls is represented by Fig. 241, from Stratum XII. This specimen is duplicated in shape and decoration by three other bowls from the same level, and is, moreover, identical with Fig. 132 from a Stratum XV grave.

The second variety of round-based bowls is illustrated in Figs. 243-245. These unusual specimens are distinguished by their small size, hemispherical shape, gritty brown ware, and red or reddish brown slip thickly applied on both surfaces. No less characteristic is the curious black-painted decoration which is always in a sprig pattern. Additional examples of this ware in other vessel forms appear in Figs. 275, 294, 295, 310 and 311; an isolated specimen from Stratum XIII (Fig. 184) has already been described. Besides these complete specimens, many additional sherds were found, but the type cannot be described as common and was in all probability imported from some distant source, possibly the Eastern Highlands.¹⁴ The thick slip covering these vessels is sometimes mottled in firing, showing both buff and red spots, and even more rarely bears light burnishing. A very few fragments of similar bowls were discovered in Stratum XI-A, but these, like the Stratum XIII example, are probably out of their original context, so that this unusual ceramic style may be regarded as having been restricted to Stratum XII. One or two bowls made of green ware bearing this sprig pattern were also found, but these are most likely the products of local potters imitating the imported vessels.

Ring-based bowls form the largest and most typical group. Different outlines may be noted over the ring bases. Figs. 248-250 illustrate a deep variety with fairly flat sides. The bases of Figs. 249 and 250 are high enough to be described as a small foot; Fig. 250, of hard green ware, also has a warped shape. All three vessels come from urn burials

¹⁴ Cf. *TH.*, Plate V, No. DH45, 30, and *AML.*, Vol. V, Fig. 51. Also see Speiser, *BASOR.*, 68, pp. 7-10 for a detailed discussion of these wares.

of infants, where they were employed as covers.

Figs. 246 and 251-253 have rounded sides, but their painted decoration is of far greater interest than any slight variation in shape, for they represent a reintroduction of the interior decoration so common in bowls of the Halaf period. All of these have quartered-circle patterns, that of Fig. 251 being especially complex. The ducks painted on the fragment shown in Fig. 252 constitute one of the very few examples of naturalistic design yielded by these strata. In Fig. 253 the quartered-circle pattern is found in its simplest form, being represented only by crossed lines. Numerous other unillustrated fragments from Stratum XII attest to the popularity of these bowls bearing quartered-circle patterns.¹⁵

Quite as typical, and equally as popular as the geometric designs described above, are the linear patterns found on Figs. 247 and 255, which also occur on the interior surface. This type of decoration is frequently limited to one side of the bowl as in Fig. 247, or may cover the entire surface as in Fig. 255, but is always formed of curved or wavy lines.

Figs. 254-256 are ring-based bowls with vertical rims. A deeper variety with carinated bodies and contracted rims are illustrated in Figs. 257 and 258, but these are uncommon. The decoration of Fig. 257 is noteworthy, as is the small foot of Fig. 258. The latter was found in front of the White Room of Stratum XII. Fig. 259 is a ring-based bowl with a splayed rim; these features are duplicated in Figs. 262 and 264. Fig. 263 has a rim with a simpler termination. These four bowls might also be described as pots because of their size, but are included here because of their typological connections with the bowls.

Fig. 265 is a fragment of a unique ring-based bowl bearing a modeled and painted figure of a leopard on the interior surface of its base. Unfortunately most of this figure is missing, but to judge from the lines of the break the head of the animal was raised from the surface, and was perpendicular to the base of the vessel. The whole effect of the

¹⁵ Quartered-circle patterns also appear on seals in Strata XII-XI; cf. Chapter VI, pp. 179-80, and Plates CLVIII-CLX, Figs. 11-33. Cf. also *JMI*, Vol. V, Figs. 51-54, 71, 72, 74-78 for particularly close analogues in Samarran pottery.

complete figure, in addition to whatever painted decoration the bowl may have possessed, must have been impressive, and it is to be regretted that we have only a hint of this in the fragment that is preserved.¹⁶

The third and last type of bowls are those characterized by flat bases; Figs. 260 and 261. Of the three types this is the least numerous, being represented by less than ten examples in comparison to the far greater number of round-based and ring-based bowls from these strata. Furthermore, since all of the flat-based bowls are undecorated, and in this particular, as well as in shape, resemble more closely the typical bowls of the succeeding levels, they may either be out-of-place specimens or the products of the last phase of Stratum XII. Most of these bowls are of light brown ware; the surfaces are often rough, and the vessels themselves roughly shaped.

Cups, Beakers, and Chalices (Plate CXXXV, Figs. 266-272). Represented in Figs. 266-272 are drinking vessels of various kinds, of which Figs. 266, 268, and 269 were in child urn burials. The remarkable bell-shaped beakers of Stratum XIII are unduplicated here, the closest approximation being the ring-based beaker shown in Fig. 266. Only this and Fig. 269 of the present group of drinking vessels are decorated. Figs. 267 and 268 illustrate the most common type; both are of brown ware, and have ring bases. Two additional unillustrated examples of this vertical-sided form were found. Fig. 272 has a profile like that of the XIII beakers, but is round-based, and has a rim that is ovoid in plan. Fig. 269 is more carefully and elaborately decorated than the others; the shape, however, is atypical, and this vessel could be described as a small pot. Figs. 270 and 271 also present problems in terminology, but chalices seems the best descriptive term.

Pots (Plates LXXIX.e; CXXXVI-CXXXVIII, Figs. 273-299). One of the most common vessels to be found in these strata are the large deep pots which usually serve as the urns of burials. These have been separated into five categories based on differences in vessel profile. In general, however, there are but two common types, of which one is

¹⁶ For a terra cotta leopard figurine from Stratum XII see Plate LXXXIII.c.

round-based, with vertical or nearly vertical sides, and with a flat, overhanging rim completing a resemblance to the letter U. The second popular type has a globular body and contracted rim. Almost all are quite large. Undecorated examples occur rather more frequently than painted ones, probably because they had a limited domestic use, and were made chiefly as funerary equipment. The wares of these vessels are usually of a green or greenish gray color, and are uniformly well baked.

The first type of pots to be considered consists of those having a U-shaped profile, illustrated by Figs. 273-275, 277, and 278. Of these, Figs. 274, 277, and 278 are the most typical, and over a dozen more specimens, both painted and plain, of those shapes were found. Fig. 273 is an isolated example of an exceptional shape distinguished by its wide, flat base and expanding rim. It was found in a grave just below XII-A, and may be one of the earliest of these pots. Fig. 275 is unusual since it combines the typical shape of Stratum XII pots with the fabric and distinctive painted decoration of the imported sprig wares already discussed. Undoubtedly this vessel was a product of local potters. The ware is a gritty light brown, but it lacks the characteristically thick, darker colored slip. The decoration betrays the same mixture of influences, for it includes the typical sprig pattern of the Highland ware in combination with the checkerboard motif that is popular with the Gawra painters of Stratum XII.

U-shaped pots with contracted sides form a slightly differing second type (Figs. 276, 279-284, and 286). Round bases are the rule, but exceptional examples of ring bases (Fig. 286) and flat bases (Fig. 276) occur. A few of these pots bear a pronounced ridge or ledge encircling the vessel just below the rim, as in Figs. 279 and 281. The undecorated pots of this variety are shallower than the others (Figs. 282 and 283); the latter has four large holes through its walls at regular intervals below the rim which may have been used in suspending the vessel.

Little need be said about the quality of the painting found on these pots. Obviously, little effort was expended in their decoration, the painter depending almost entirely on mechanical, stereotyped motifs, such as wavy lines, checkerboards, etc. With Fig.

280 (=Plate LXXIX.e) however, we have as a refreshing change an improvised, imaginative pattern showing birds (?) and an unidentifiable animal against a star-studded background. The whole design seems to be a painted fantasy, rather than (as with Fig. 308=Plate LXXVIII.a and b) an attempt to record actual figures known to the artist. The figures on this vessel, to be sure, are not carefully delineated, but the decoration is nevertheless a refreshing attempt at artistic expression at a time when painting had reached a low artistic level.

Members of the third type of pots are characterized by long, sloping shoulders and splayed rims (Figs. 285, 288, and 289). Somewhat more graceful than the preceding varieties, these are, however, not nearly so common. Fig. 285 is more typical of Stratum XII than the other two specimens, which have flat bases. In this respect, as well as in profile, Figs. 288 and 289 have closer relationships with the jars of XIII than those of XII (cf. Figs. 210 and 211).

The fourth type is one of the most popular. It is composed of pots having rounded bases, globular bodies, and contracted, short necks (Figs. 287, 290-295). Some of these are neckless or nearly so, as, for example, Figs. 287, 290, and 291. Figs. 291 and 293 are of mottled cooking-pot ware, while Figs. 294 and 295 are additional examples of the red-slipped, sprig-decorated wares already encountered in Figs. 243-245, and 275. The others are of the more usual green ware, decorated either in bistre or sepia paint.

Spouted pots constitute our fifth and last type, which is illustrated by Figs. 296-299. Four unillustrated pots similar in shape to Fig. 296 were found, all of which were simply decorated. Figs. 297-299 are made of gritty black ware, poorly baked and lightly burnished, and all are cooking pots which had outlived their domestic usefulness, and were then utilized as urns in infant burials. A duplicate of Fig. 297 was discovered which had a wider and longer spout, while still another had a pair of short spouts set closely together.

Storage Jars (Plates LXXVIII.a and b; CXXXVIII-CXXXIX, Figs. 300-309). For the first time at Gawra, storage jars are common. Like other large vessels in these strata, these storage jars

were often utilized as burial urns. The type is remarkably homogeneous, being characterized by rounded bases, globular bodies, and short necks. Some variations in outline are, of course, to be found, but the differences are minor. For example, Fig. 302 has a concave base, and Fig. 306 a flat one. Fig. 301 is one of the few vessels of any type to bear handles, which in the present instance are small loops, while the bodies of Figs. 307-309 are nearly ovoid.

Most storage jars are decorated, but unpainted specimens may be seen in Figs. 301 and 303. Figs. 300 and 302 provide the only examples of ribbed decoration found in these levels, recalling the similarly decorated jars of Stratum XIII (Figs. 218 and 220). However, the present specimens have ribbed shoulders only, which in Fig. 300 is restricted to a narrow band below the neck. Furthermore, these jars lack the secondary incisions and punctures found on their Stratum XIII prototypes, which are thus artistically superior. The decoration of such jars as Figs. 304-308 is typical of the uninspired painting of this period, the cross-hatched triangles and double axes arranged in a checkerboard fashion being overworked Stratum XII designs. Fig. 309, however, provides a valuable example of artistic heterodoxy. Made of light green ware, and bearing dark brown (originally red?) painted decoration, it had, when discovered, contained the remains of an infant and lay under the eastern wall of Room 26 (Square 4-K) of Stratum XII. Its painted decoration, which makes it the outstanding product of Stratum XII, is composed of twelve panels covering two-thirds of the exterior of the vessel. Ten of these contain linear and geometric patterns; the other two, one of which is incomplete, represent what must be considered as one of the earliest attempts at landscape painting. The incomplete panel depicts two horned animals, perhaps ibexes, facing away from a straight, thick line extending the whole length of the panel, which must symbolize a river. The small herringbone lines connected by the river may suggest small *wadis*, or may have been added merely to emphasize the river line. Surrounding the main figures of river and animals are wavy lines, possibly mere fill-ins, but perhaps representing other details of this landscape, the significance of which is not now clear.

The remaining panel is the most important. The long sides of this panel are trimmed with triangles, which unquestionably indicate mountains. Between the points of the triangles a river follows a tortuous course, the heavy line representing the river being again embellished with short, oblique strokes. To the left of the river stands a human figure¹⁷ holding an object, and facing a double-humped, horned animal on the opposite bank, as well as a smaller animal with a curved tail. Filling in open spaces in this panel are dots and additional smaller triangles. The meaning of this crude pictorialism is clear. It shows a hunting scene in a river valley; the man holds a weapon of some kind, whether bow, sling, mace, or spear, with which he is attacking a horned animal on the opposite bank of the river. This animal, while fleeing to the safety of the hills, is being harried by a dog.

The significance of the decoration of the entire jar is perhaps less obvious, but if geographical features such as rivers and mountains are predominant in the hunting panel and in the incomplete panel showing the horned animals, it is certainly possible that the designs contained in other panels may also suggest different kinds of terrain such as rolling plains, mountains, deserts, and marshes. Such an interpretation may be met by the objection that many of the patterns presumed to represent geographical features are commonly found as abstract decoration on all pottery from the present strata, but such an argument does not account for the decoration of the two panels filled with dots and crisscrossed lines. Moreover, the artist must have had some real landscape in mind, for it is assuredly not coincidental that only along the rivers do we find human and animal figures; that one river follows a straight, swift course while the other meanders, that in the hunting scene there are mountains of varying height, and that only two rivers are shown, separated by other panels. These details cannot be imaginative; they must reproduce actual geographical features known to this prehistoric artist.

This attempt to record varied landscapes in a series of painted pictures may, therefore, be inter-

¹⁷ This is the first painted representation of a human figure found in any stratum since XVII. Cf. Plate LXXV, a and b.

puted as a kind of map. As such it is probably the oldest map yet discovered, but it is, in addition, a priceless record of the ages preceding the invention of writing and may even be regarded, in a certain sense, as a halting step in the general direction of that goal.

Small Jars (Plates CXXXIX-CXL, Figs 310-317). These vary somewhat in size, but usually have round bases and globular bodies. Squat, flat-based jars such as Fig. 316 are rare. Necks are short, sometimes rising vertically (Figs. 310, 315, and 317), or expanding to the rim (Figs. 311, 312-314). The flat, overhanging rim of Fig. 315 is unique in this class of vessels, and may be a copy of that feature of the U-shaped pots. Painted and plain specimens occur in about equal numbers, but Figs. 312 and 314 are the only small jars to have burnished decoration. Figs. 310 and 311 are the final examples of the thick, red-slipped ware characteristic of Stratum XII. Although this distinctive variety of pottery is most common in the form of small shallow bowls (Figs. 243-245), the present specimens are otherwise typical in particulars of fabric and decoration. Fig. 311 was discovered below the floor of a room in Square 5-K of XII, and contained the necklace shown in Plate XCI.a, as well as an unillustrated, large, limestone stamp seal with an obliterated design.

Varia (Plate CXL, Figs. 318-327). Only three bottles were found, two of which are shown in Figs. 318 and 321. Both are made of brown ware, but the former is covered with a red wash and has incised decoration. Wide funnels with curved sides are introduced in Stratum XII-A, but first become common in XII. Fig. 320 is representative of several more, some of which had their interiors covered with bitumen. The series of piercings ringing the bottom of Fig. 319 is an unusual feature, while an even more unconventional specimen is illustrated in Fig. 325. The deep bell-shape of this object and its small opening near the rim are details which are unduplicated on other funnels. Miniature vessels are shown in Figs. 322, 324, and 327, while the ubiquitous handled-pot already encountered in Area A, Stratum XV, and Stratum XIII is again represented in Stratum XII by Fig. 323. Fig. 326 is another hoof-shaped pot similar to the one discovered in Stra-

tum XIII (Fig. 231), but the present specimen lacks the compartments and exterior clefts of its prototype, and is nearly twice as large.

F. STRATUM XI-A
(PLATES LXXIX.c; CXLI-CXLIII,
FIGS. 328-366)

This stratum, architecturally dominated by its unique Round House, is also marked by a profound change in the character of its ceramic products. Painting as a means of decorating pottery is in this level almost completely discarded or forgotten and is not replaced by any new ornamental techniques. As a result, Stratum XI-A is the first occupational layer at Gawra to produce predominant undecorated wares, although enough decorated vessels occur to demonstrate that painting and burnishing were not completely scorned. This abrupt shift from painted to plain wares is the most obvious change to be noted in the pottery of this stratum, but it is not the only difference, for it is accompanied by sweeping changes in the shapes of the vessels themselves, as well as by important differences in the wares, which are decidedly inferior. Accordingly, this pottery shows few relationships of any kind to the painted fabrics of the occupations immediately preceding Stratum XI-A.

The amount of pottery recovered is not as great as that from XII, largely because the practice of interring infants and children in urns has now been curtailed (cf. Chapter III, Table A, p. 106). The typical ceramic products of this level were found in fairly ample quantities, however, so that the reduced number of major types of vessels are still represented by groups rather than by single specimens. Many of the types that had been popular in Strata XII-A and XII are now unknown; among these may be mentioned ring-based bowls, U-shaped pots, pots with sloping shoulders, globular pots with short necks, and cups and beakers. The imported red-slip wares with painted decoration in sprig designs have also disappeared. The storage jars introduced in Stratum XII are continued into XI-A, but they are now much less common, while small jars with globular bodies, and carinated bowls with round bases and contracted rims represent other survivals. The common bowl form of this level is wide and shallow,

having straight or incurving sides and a wide, flat base. The most important new vessel form introduced in XI-A is a pot with a high double rim. Hole-mouth pots are another original development, and one unusual carinated bowl or beaker has a long, trough-like spout with appliqué decoration. Spouted vessels are slightly more common than before, but ring bases on all vessels forms are rare.

Most of the vessels produced by XI-A are crudely shaped and have irregular profiles; this is particularly true of the flat-based bowls and small jars. The pottery is handmade, the *tournette* apparently having been employed to a lesser degree than in Stratum XII. The surfaces of many vessels were left in an extremely rough state; this may, in great part, be due to the fact that, since no paint was to be applied, the surfaces did not require the secondary smoothing typical of painted pottery. Some increase in burnished specimens is noticeable, but this is almost always restricted to cooking pots, where the lower quality of the ware demanded such treatment.

The green and greenish gray colors so characteristic of the pottery of XII-A and XII have now been replaced to a large degree by brown, buff, and reddish brown fabrics. These are not only inferior in hardness to the earlier varieties, but are coarser as well. Most vessels have thicker walls than had been usual, probably because they lack the strength that would have been imparted by higher firing temperatures. The tempering material now tends to be straw, coarse sand, or large pebbles; in one instance, ground shell was employed.

Bowls (Plates LXXIX.c; CXLI, Figs 328-342). There are two main types of bowls; the more common variety has a flat base, sharply expanding sides, and rough, irregular surfaces, while the other is round-based. The first type is represented by Figs. 328 and 330. Many other examples of bowls with flat bases were found, but all have the same general outlines, characterized by straight or slightly incurving sides, and a wide mouth. The remaining flat-based bowls illustrated in Figs. 329, 331, and 332 are unusual specimens. Fig. 329 is the largest bowl yielded by Stratum XI-A, while Fig. 331, which was found in Square 8-M, next to the Round House, is made of an uncommon coarse black ware, pebble-burnished, and contains tempering material com-

posed of ground shell. Fig. 332 has a thicker base than is usual. Both this and the main type of flat-based bowl (Figs. 328 and 330) represent bowl forms already encountered in Stratum XII (cf. Figs. 260 and 261), but they are unquestionably more typical of XI-A than of the earlier level.

Round-based bowls are of various kinds; Figs. 333, 334, and 336 are carinated, with walls which contract to the rim above the line of carination. In this respect these bowls resemble Figs. 235-237 from Strata XII-A and XII, as well as Figs. 167-170 from Stratum XIII; consequently they represent one of the very few shapes carried over in Stratum XI-A from the earlier painted pottery levels. It must be noted, however, that these carinated, round-based bowls are much less popular in XI-A than in underlying strata; in levels later than XI-A the type disappears completely. Figs. 335 and 337 are isolated specimens. The rolled rim of the former seems to anticipate this feature in later bowls.

The ring-based bowls characteristic of XII are now almost completely unknown, but Figs. 338 and 339 provide two exceptions. In the case of the latter an original source in Stratum XII may be indicated by the painted decoration and shape of this specimen. Fig. 338 is, however, a typical XI-A product as shown by its crude shape and buff-colored ware.

Spouted bowls are shown in Figs. 340-342. The first two of these were domestic vessels, for they are made of coarse, mottled, cooking-pot wares; Fig. 342 (=Plate LXXIX.c) is, however, much more important. The carinated shape of this vessel is unique in Stratum XI-A, but is duplicated by a number of vessels from the later occupation of XI. These were undoubtedly used as drinking vessels, and it is possible, therefore, that the present specimen should also be described as a cup. The long, trough-like spout is transversely ridged, and is covered with appliqué pellets of clay in what its discoverer described as "an effort to simulate the rocky bed of a cascading stream."¹⁸ The spout opens into the body of the vessel below the shoulder; the liquid was conducted from the body through sieve-like openings in the bottom of the spout next to the rim, and then passed down its noduled length. The neck of

¹⁸ Charles Baché, *BASOR.*, 62, p. 8.

this bowl, or cup, is decorated with incised horizontal lines, exactly as on the later unspouted cups (cf. Figs. 385-388, from Stratum XI). Additional fragments of similar trough spouts were found in XI-A, but this is the only complete specimen.

Pots (Plate CXLII, Figs. 343-348). These have various profiles, but all possess round bases. None of the major pot forms of XII is continued in this stratum; specifically, the U-shaped pots, pots with sloping shoulders, and globular pots with short necks are now unknown, and with them has vanished most of the popularity of this type of vessel. Two new types, however, make their appearance; the first is illustrated by Fig. 346, and is characterized by a wide double-rim, forming a broad channel around the top of the vessel. The inner rim is usually pierced to permit drainage of the channel.

Figs. 343 and 344 illustrate another original XI-A form featured by a flat top and a hole-mouth. Fig. 343 has, in addition, two short spouts set closely together; a similar double-spouted jar containing an infant burial was found in Stratum XII, into which level it may have intruded from the present one. Both Figs. 343 and 344 are of coarse, poorly baked, dark mottled ware, and both are burnished. Only one other complete hole-mouth jar was discovered in XI-A; this had a single spout, and was employed as the urn of an infant burial (Locus 224). However, numerous other vessels made of similar cooking-pot wares were found, but were too fragmentary to reconstruct.

Figs. 345 and 347 are isolated examples of their respective forms. Fig. 345 is probably a prototype of a variety which is popular in the succeeding group of strata, as is indicated by its profile, ring base, and painted decoration, which resembles the later style rather than that of the Obeid period (cf. Figs. 408 and 409, from Strata XI and IX, respectively).

Storage Jars (Plate CXLII, Figs. 349-351). These are much less common than before, only four specimens having been found in Stratum XI-A, three of which are illustrated in Figs. 349-351. Oval as well as round-bodied storage jars are known in Strata XII-A and XII, but with such limited material no further observations can be made.

Small Jars (Plates CXLII-CXLIII, Figs. 352-359). Small jars seem to have been among the most

popular types of vessels in the present stratum, and are typologically one of its most uniform groups. They usually have a globular body and a short neck (either vertical or expanding) ending in a simple rim, as in Figs. 352 and 354. The wares of these small jars are usually thick. Some shouldered jars like Figs. 355 and 359 occur, but the splayed rim of the latter is unusual, as is the painted band on the neck of Fig. 353.

The curious, double-necked jar shown in Fig. 356 is not an original XI-A form, for a similar jar was found in the Stratum XIII Well (Fig. 221), while a fragment of another (unillustrated) was used as the lid of an urn burial (Locus G36-128) sunk into Stratum XII. Nevertheless, this type of vessel was undoubtedly more popular in Strata XI-A and XI, for numerous examples were noted in both levels.

The only flat-based jars appear in Figs. 357 and 358. The painted decoration of Fig. 357 is noteworthy as one of the few examples of this decorative technique to be yielded by Stratum XI-A (cf. Figs. 339, 345, and 353).

Varia (Plate CXLIII, Figs. 360-366). Miniature vessels seem to have been less popular in the present stratum than in any underlying level, Figs. 361 and 362 being our only specimens. Fig. 360 is a specialized type of strainer; why such a form was required, and to what precise purpose it was applied is speculative. Fig. 363 is apparently a section of drain pipe. Of more interest is Fig. 364, which may have been a lamp. This object is oval in plan, with low walls around the sides, and an opening at the narrow end, in which the wick may have lain, although there are no traces of burning. In the center was a vertical projection of unknown height, possibly a handle of some kind. The earliest jar stand yet found at Gawra is shown in Fig. 365; these become common in later strata. Fig. 366 is a funnel.

G. STRATA XI-IX

(PLATES LXXIX.a, b AND d, LXXX; CXLIV-CXLVIII, FIGS. 367-443; CLII, FIGS. 514-525)

The four strata forming this group, namely XI, X-A, X, and IX, are united by the occurrence in all of them—except Stratum X-A—of temples identical in plan and in many architectural details. The

pottery found in these occupations corroborates the homogeneity of the architectural evidence, for most types of vessels are found throughout all four occupations; nor are there any great changes to be noted in the wares themselves in the period represented by Strata XI through IX. After Stratum XI-A, a period of plain pottery, decorated vessels reappear in Stratum XI, and only in the new decorative techniques may important stratigraphic differences be noted within the present four levels, although by far the greater majority of vessels remain undecorated throughout.

The main types of vessels are round-based and flat-based bowls, cups, beakers, hole-mouth pots, ring-based pots, double-rimmed pots, and jars. Bowls and jars are typologically the most uniform of all of these, occurring in all four strata, and exhibiting the fewest variations of profile, despite the fact that they are the vessels in most common use. Hole-mouth pots, already known in Stratum XI-A, are continued in XI, but disappear in the upper levels of the present stratigraphic unit, while ring-based and double-rimmed pots occur throughout all four occupations.

As if to compensate for their absence in the preceding few levels, drinking vessels reappear now in even greater numbers than in Stratum XIII. There are, moreover, three well-defined types of drinking vessel, namely, cups, beakers, and chalices, of which only the latter is rare. Cups may be distinguished by their rounded bases and sides, carinated at the middle to form a narrow waist, from which point they expand to a wide rim. The beakers superficially resemble those from Stratum XIII, but they now have a broader bell-shaped outline, and are always round-based. The unusual chalice form is characterized by a rather high foot, on which is set a shallow bowl. All three types of drinking vessel are introduced simultaneously in Stratum XI, and attain their greatest vogue in that level. In Strata X-A and X they still occur in some numbers, but in Stratum IX cups are completely unknown, and the beaker and chalice forms are represented only by a very few specimens.

One of the most important technical improvements to be made in the entire ceramic history of Gawra occurs in Level IX, in which stratum wheel-

made vessels are noted for the first time. These specimens number but four, but the obvious advantages of wheel-turning as against the use of the slow wheel, or *tournette*, not to speak of the difficulties of pottery manufacture by hand, were such that in the succeeding stratum of VIII most of the pottery is wheel-made.¹⁶ Possibly the wheel was introduced too late in Stratum IX for it to leave more evidence of its employment, but whatever the reason, only a very few vessels may be attributed to it, all other pottery being made by hand.

The wares of all four strata are predominantly brown or buff; in addition, Strata XI and X furnish many examples of red and reddish brown fabrics, while gray wares are met with, although infrequently, in Strata XI and X-A. Some green or greenish-tinted wares occur throughout, but most are found in the two lowest levels of our present group, usually in beakers or cups. These green wares are among the best products of the Strata XI-IX potters, being quite thin and hard; the more ordinary brown wares, on the other hand, tend to coarseness and are often poorly baked. A high proportion of vessels from all of the present levels were covered with slips, usually light in color, but the practice of wet-smoothing has been greatly restricted. As in Stratum XI-A, many vessels have rough surfaces and irregular outlines, particularly those that are undecorated.

After an almost complete absence of any kind of decoration in the period represented by Stratum XI-A, we find in the present levels the introduction of three kinds of decorative techniques. The first of these consists of incised, impressed, punctured, or appliqué decoration, which is found only on cups and beakers, the cups being incised only. Furthermore, although the beaker form is frequently found in all levels from XI through IX, those beakers bearing impressed, incised, punctured, or appliqué decoration come almost exclusively from Strata XI and X-A, the upper pair of levels of this group yielding either undecorated beakers or a very few with painted decoration.

The second decorative technique is that of painting, which is reintroduced in XI and continues

¹⁶ TG., 41.

through Stratum IX. This painting is stylistically unrelated to the decoration found on the pottery of Strata XII-A and XII, and consists for the most part of a repetitious pattern of cross-hatched triangles (Figs. 408, 521, 523-525), or of simple lines, dots, or smears of paint (Figs. 375, 383, 395, 396, and 412). The paint employed is usually dark brown or reddish brown in color. One of the three beakers found which bear painted decoration shows the figures of three men and two animals (Fig. 398); this, together with Figs. 428 and 522 are the only examples of naturalistic decoration to come from these levels.

The third form of decoration is the least popular, and is limited to gray (or black) wares; this takes the form of burnishing, always on the exterior surface of vessels. Such burnished examples are found almost entirely in Strata XI and X-A, but are most common in XI.

To summarize, all three decorative techniques make their appearance in Stratum XI; of the three, painting is the only one to persist throughout all four occupations, while burnishing, and the incised-punctured-appliqué techniques may be said to be limited to Strata XI and X-A.

Bowls (Plates LXXIX.d, LXXX.c; CXLIV, Figs. 367-384). The bowls of these strata may be roughly classified by the type of base they possess. Following this criterion we have three types, namely, flat-based, round-based, and ring-based bowls, of which the flat and round-bottomed bowls are by far the most numerous. Both of these types occur side by side throughout all four occupations, but the flat-based bowls are more common in Strata XI and IX than in other levels, while in the intervening strata of X-A and X the round-based form seems to be the usual one. Bowls with ring bases are unusual. Examples of these, to be sure, have been found in all levels now being considered, but they occur too infrequently to justify any further conclusions.

Flat-based bowls are shown in Figs. 367-371. The walls of this type of bowl curve in as a general rule, but are sometimes straight as in Fig. 367. Bowls with flat bases found in Stratum XI seem to be somewhat deeper than those from Stratum IX, but exceptions to this rule are not lacking. Sides expand

sharply on some examples, as Fig. 368, whose concave base is duplicated only by one other specimen from these strata. Flat-based bowls are among the crudest products of the potters of this period; all are handmade of coarse wares, and are often irregular in outline.²⁰

Round-based bowls (Figs. 373-380) are found in even greater numbers than those with flat bases. Rims of this type are plain only exceptionally, some treatment of the rim being more usual. Thus we have rolled rims as on Figs. 376 and 379; grooved (Fig. 378); wedge-shaped (Fig. 375); or merely thickened, as Fig. 380. The rim of Fig. 373 is plain, but there is an incised line on the exterior just below the rim; this is perhaps a modification of the grooving on Fig. 378, one of the largest bowls yielded by these strata.

The deepest type of round-based bowl (Figs. 376 and 379) appears to be restricted to the lowest level of our present group. One nearly hemispherical bowl from Stratum X-A, of black ware, was lightly burnished; another round-based bowl was decorated with dark red paint over the upper half of the interior and in a band about two centimetres wide below the rim on the exterior surface. Fig. 375 is also decorated with reddish brown paint; this takes the form of two groups of two vertical streaks, one group each on opposite sides of the interior below the rim.

Plate LXXX.c shows the only remaining painted bowl, found in Square 9-Q of Stratum IX. With rounded base and sides and plain rim, this bowl is made of gray ware, burned red in firing. The entire interior surface is covered with round spots of dark brownish-red paint; the exterior has numerous streaks and smears of the same paint. The main interest of this bowl, however, lies in the modeled figures on its interior, which form a semi-circle below the rim. These figures were modeled and attached to the bowl before it was fired, the joints being plastered over with the clay of the bowl. The figures represent various animals, of which the only one that can be identified is that of a ram; possibly the others are intended to represent sheep and a dog. If so, the central projection, which

²⁰ Flat-based bowls are common in Stratum VIII; TG., 42, and Plate LXV, No. 56.

had been broken off in antiquity, may have represented the shepherd, but there is now no positive indication of this except its position, and the shape and size of the break. It is probable that it was the intention of the potter simply to introduce a pastoral scene, for what purpose is not known. There is, at any rate, no reason to connect this vessel with religious worship or practices, for it was not found near the Stratum IX Temple, and it seems to have been intended as a form of artistic expression rather than as a ritual object, such as an offering-tray or similar object.

Spouted bowls are extremely rare in these levels, only two having been recorded. Both were similar in shape, and in the length and position of their spouts, to Fig. 340 from Stratum XI-A.

Fig. 377 (=Plate LXXIX.d) is a bowl of unusual shape, having a rim that is pinched to form a pouring lip. Decorated with impressed rosettes, such as are usually found on the beakers, this may have served as a drinking vessel. Only one other round-based bowl requires mention; this is a typical specimen of the imported red-slipped ware with stitched or sprig-painted decoration known from Stratum XII, and resembling in shape Fig. 245 from that stratum. Found in a baby's grave in XI, this must have been carried over from the earlier occupation, for it is the sole occurrence of this outstanding ware above Stratum XII.

The ring-based type of bowl is shown in Figs. 381-384; of these illustrated specimens only Fig. 383, from Stratum X-A, is painted, although painted ring-based bowls have been encountered in all lower levels except XI. As in Fig. 383, the decoration of all is of the most rudimentary kind, consisting of parallel streaks, simple bands, or pendant semicircles at the rim. The ring bases of these bowls are usually rather high, as Figs. 381-383, while rims usually curve in (Figs. 382 and 384). The out-turned rim of Fig. 381, as well as its shoulder carination, is unusual, for the normal bowl shape of these levels has rounded sides. This example, from Stratum IX, is wheel-made.

Cups (Plate CXLV, Figs. 385-391). The cups of Strata XI-X have rounded bases; the lower part of the body is rounded, while the middle is sharply carinated. Above the carination the walls contract

to a narrow waist from which they again expand to a wide rim. The narrow waist thus affords a convenient place to grasp the vessel and, in order to provide a more secure grip, this part of the cup is usually incised horizontally in several parallel lines. However, these cups never bear the elaborate impressed, incised, punctured, or appliqué decoration found on the beakers.²¹ That the incisions on these cups are primarily utilitarian rather than decorative is indicated by the fact that they always occur at the narrow waist of the vessel, where the cup would be held, and they are always in the form of a few parallel, horizontal lines (Figs. 385-388). Fig. 389, from Stratum X, is apparently a degenerate form, for not only does it lack the incised lines of all other examples, but the waist of the cup is vertical-sided as well. Fig. 390, from Stratum XI shows another deviation from the normal cup profile; in that specimen, the carination of the body forms a small, sloping ledge above which the sides rise nearly vertically to the rim. Above the carination the body walls are vertically corrugated, the rim thus ending in a scalloped edge. Five incised lines are spaced regularly between the shoulder and the rim. Fig. 391 is still another unusual example; this has the standard incised lines around the waist, but in addition bears a moulded band, with nicked edges, on its body. Apparently the projection on the side of the vessel, most of which is now missing, was a long spout; in this detail our present specimen is paralleled by Fig. 342, from Stratum XI-A. This is a vessel of identical body profile, but with a long trough-like spout leading from the rim.

Beakers (Plates LXXIX.a and b, LXXX.a; CXLV, Figs. 392-398). These vessels, which occur in diminishing numbers from Stratum XI through IX, possess two outstanding characteristics. The first is their bell-shaped outline which, although it resembles the typical beaker form of Stratum XIII, is wider, never possesses the flaring rim of the earlier beakers, and is always round-based. The only beaker illustrated that does not conform to the standard shape is Fig. 396, which is of simpler outline and came from Stratum IX. In all proba-

²¹ See, however, Plate LXXIX.a, No. 1 for the only exception to this rule. The fragment illustrated there is the upper part of a cup with elaborate appliqué decoration.

bility this specimen is a debased variation of the earlier, more graceful type.

The second feature of these beakers is their decoration, for although many plain examples occur (Figs. 392, 394, and 397), beakers with painted decoration (Figs. 395, 396, and 398) or with incised, impressed, punctured, or appliqué decoration are equally common. Oddly enough, these various decorative techniques—with the exception of painting—seem to have been restricted to beakers, and are never found on any other type of vessel. Of these techniques, the punctured type appears to have been the most popular, to judge by the number of extant examples (Figs. 393 and 519; Plates LXXIX.b, No. 5; LXXX.a, Nos. 1-5). This type of decoration usually consists of two horizontal bands of regularly spaced vertical punctures; apparently a comb, or some similar implement of bone or wood was impressed in the clay to obtain this design.

Fragments of beakers with incised decoration are shown in Figs. 515 and 518, and on Plates LXXIX.a, No. 2; LXXIX.b, Nos. 3, 4, and 7; and LXXX.a, No. 8. Incised decoration on this type of vessel most commonly takes the form of zigzag bands with small fill-in lines, or a herringbone pattern, but incised specimens are not common. Even less common is the distinctive, deeply cut decoration of the fragments shown in Figs. 517 and 520; Plates LXXIX.b, Nos. 1, 2, and 7; and LXXX.a, Nos. 6 and 7.

Appliqué decoration is illustrated by the sherds appearing on Plate LXXIX.a. No. 1 is a fragment of the only cup found with any decoration other than a few incised lines. No. 2 of the same plate has both incised and appliqué decoration—the latter in the form of small rosettes, or spoked wheels, with each segment of the circle formed by the spokes containing a small dot. Similar rosettes or wheels are found impressed in the clay of some beaker fragments; cf. Figs. 514-516; Plate LXXIX.b, No. 6, and Plate LXXIX.d.

Only three painted beakers were recovered, all from Strata X and IX. Of these, Fig. 396 bears only four simple bands; the unusual shape of this beaker has been discussed in an earlier paragraph. Fig. 395 has a single band, but also bears finger

smears of paint that do not appear on the drawing. Fig. 398, however, is one of the very few vessels from Gawra to bear painted representations of the human figure; in this case three men are depicted, all with arms upraised. Two men hold branches or palms; unfortunately that portion of the beaker bearing the upper part of the figure of the third human is missing, but it may be assumed that he likewise held a similar branch or palm, especially since he is shown, like the others, with arms upraised. Filling in the spaces between these human figures are two curious bipeds or birds. The portion of the design just described occupies but half of the beaker surface; the remaining half bears two triangles filled with cross-hatching, between which is another branch or palm (cf. Figs. 521, 523-525).

This scene may have a religious meaning; it may portray a religious procession, or may have a more obscure symbolism, but whatever the correct interpretation may be, the decoration of this beaker is a unique example of naturalistic painting in a period that is characterized by a primitive geometric and linear style. The crudity of the painting found in these strata is apparent even in the present example, on which the human figures are delineated in wooden attitudes, with stylized heads and ill-proportioned bodies. Even the triangles show the same lack of care in execution; nevertheless, despite its stylistic limitations and lack of craftsmanship, the interest and importance of the subject matter of this scene makes the beaker one of the outstanding products of these levels.

Chalices (Plate CXLVI, Figs. 399-401). These are numerically the smallest class of drinking vessels; and although all three illustrated examples are of different shapes, all are characterized by high pedestals, on which is a shallow bowl. Fig. 399, the crudest of the three, has a solid foot, but this is exceptional. Fig. 401 is irregular in outline; this like Fig. 399 came from Stratum XI. These two chalices resemble each other more than the third illustrated specimen shown in Fig. 400 (Stratum IX), which is larger, has a higher foot, and is a more fully developed form. A chalice of a shape similar to Figs. 399 and 401 was found in Stratum VII.²²

²² Cf. *TG.*, Vol. I, Plate LXV, No. 59.

Pots (Plates CXLVI-CXLVII, Figs. 402-417). Of the various types of pots found in Strata XI-IX, three are typical of these occupations. The first is the hole-mouth type, usually made of coarse, cooking-pot ware, and illustrated by Figs. 402-404. This type always has a contracting rim that forms a flat or sloping shoulder; rims are sometimes turned outwards, or rolled (Fig. 403), but are never a prominent feature. These hole-mouth pots are a type that is continued from Stratum XI-A (cf. Figs. 343 and 344); both of the present specimens were yielded by Stratum XI. None was found in the three upper levels of the present stratigraphic group, so that they are typical only of Strata XI-A and XI.

The second type of pot identifying itself with these levels is the double-rimmed type shown in Figs. 405-407. Although previously encountered in Stratum XI-A (Fig. 346), these peculiar vessels become far more common in XI. In the middle strata of X-A and X they are almost completely unrepresented, but Stratum IX finds them again in somewhat limited use, in which level they finally disappear. Figs. 405 and 406 illustrate the usual profile, with pointed bases and high outer rim joining the inner one at what is almost a right angle. Fig. 407 is exceptional; not only is its flat base unusual, but it is only a fraction of the size of the others, and was found in a grave. In this type of pot, the inner rim is always pierced in a few places to drain the channel formed by the two rims.

Ring-based pots are the third common type, and are represented by Figs. 408 and 409; Fig. 410 has a spout in addition. The profile of this last specimen, and that of Fig. 409, both of which are distinguished by globular bodies and by sharply angled, flaring rims, was duplicated on a number of other pots from all four levels of the present group, although the form seems to have been most popular in Strata X and IX, and is not carried over into strata above IX. Fig. 408 is the only pot with painted decoration, which is formed of the usual pattern of cross-hatched triangles.

The remaining pots show types represented by single specimens. Fig. 411 has a high rim not unlike Figs. 409 and 410, but lacks the contracted neck and globular body of those vessels. The spout is set

unusually low. Figs. 413, 414, and 417 resemble, in general outline, some of the pots from Stratum XII. This resemblance, however, implies no relationship to that level, since the form is simple and is probably independently evolved in this later period. It should be noted, however, that all three specimens come from Stratum XI, the lowest level of our present stratigraphic division, so that a typological connection, although unlikely, is not impossible. Figs. 415 and 416, the latter being one of the few wheel-made specimens, represent a type known from Stratum XI-A; cf. Fig. 348. One of the few painted pots is illustrated in Fig. 412; the decoration of this vessel consists of a band at the rim and round spots of paint on the shoulder.

Jars (Plates CXLVII-CXLVIII, Figs. 418-434). The jar form is extremely popular in these levels, most jars tending to be small, with a height averaging around ten centimetres. Despite their comparatively large numbers the jars show few typological variations, the typical shape having a rounded base and rounded sides that expand to a sloping shoulder (Figs. 418-426). Necks are fairly high and wide, and are often vertical-sided, while the rims may be plain (Figs. 418 and 419), but are more commonly splayed. Fig. 421, from Stratum IX, is wheel-made, while Fig. 422 (also from IX) is made of gray ware, faintly burnished.

Figs. 424 and 425 possess carinated bodies; in addition, the former has a flat, overhanging rim which is more common in Stratum XII than in any of the present levels. Figs. 426 and 427 have extremely short necks and plain rims. Fig. 428 is a fragment of a round-bottomed jar with an unusual incised decoration representing two rows of gazelles. The pattern is inverted on this vessel, the heads of the animals pointing to the base. Fig. 430, like Figs. 422-424, is almost miniature in size.

The remaining jars, illustrated in Figs. 429 and 431-433, are much larger than any previously discussed. The squat, globular body of Fig. 431 is unusual, as is the wavy-lined painted decoration of Fig. 429. Both were discovered in graves sunk into Strata XI and XI-A respectively. The long cylindrical shape of Fig. 432 is entirely without parallel in the material from any Gawra level, and although it is the largest vessel yielded by this group of strata,

it is possible that it may be an imported specimen. Fig. 433 differs from the other jars in having a globular body and a short, narrow neck. The painted decoration which covers the upper half of this vessel is, however, typical of Strata XI-IX, for it consists merely of crisscrossed lines.

Before passing on to other types of vessels, mention must be made of a number of fragments of double-necked jars found in the occupations of XI-IX; cf. Fig. 434. All of these come from vessels apparently similar in shape to Fig. 356 from Stratum XI-A, and the only new development that may now be observed is a tendency to bring the necks closer together, and to set these vertically on the vessel, rather than obliquely as on the XI-A specimen and on the example from the Stratum XIII Well shown in Fig. 221. Five fragments of double-necked jars were yielded by Stratum XI, and only one each by Strata X-A, X, and IX; but this odd type of vessel, first observed as far back as Stratum XIII, persists even into Stratum VIII.²³

Incense Burner (Plate CXLVIII, Fig. 435). The first incense burner discovered in any level since XIII (Fig. 228) is illustrated in Fig. 435. This was discovered in an open area of Square 8-M, Stratum XI, and was found nearly intact and in an upright position. It is nearly cylindrical, the greatest diameter being at the base; above the base the walls contract to a point just below the rim, where they expand sharply; the rim being nearly as wide as the base. Like its Stratum XIII prototype, this object is featured by windows, but these now number but four. Two are triangular and two rectangular, the triangular windows occurring above the others. On one side of the base, away from the windows, is a wide, square opening, probably to enable one to reach inside the object while it was in use. Made of poorly fired, coarse brown ware, the present specimen lacks the decorative details of the incense burner from Stratum XIII, as well as its general significance.

Varia (Plates LXXX.b; CXLVIII, Figs. 436-443). Funnels are shown in Figs. 436 and 437, both from Stratum XI. The latter has a thickened, vertical rim decorated with horizontally incised lines

on the exterior. Both bear traces of bitumen on the interior.

Miniature vessels (Figs. 440-443) are somewhat more common than before, and are particularly a feature of Stratum XI. All appear to imitate types of vessels of standard size from the present levels.

Ladles occur in all four occupations. The only specimen recovered nearly intact is shown in Fig. 439. A few colander fragments were also found, but these are too incomplete to illustrate. In addition, part of a jar with perforated walls similar to Fig. 360, from Stratum XI-A, was discovered in Stratum X. Fig. 438 is a section of drain pipe which was uncovered *in situ* under a wall of a room in Square 4-O of Stratum XI.

Most interesting is the pottery fragment shown on Plate LXXX.b. This object, discovered in Stratum IX, is apparently a fragment of a *kernos*, known from Crete and the Cyclades. It consisted probably of a hollow ring, supporting a number of small vases, and undoubtedly had some cult function. It should be noted that the Mediterranean *kernoi* are later than the period represented by Stratum IX at Gawra. In this connection it is perhaps not without significance that our fragment was discovered in Square 11-Q, on the western edge of the mound, and there is consequently a distinct possibility that it may be an intrusion from a later level. On the other hand, its occurrence in any Gawra level would be of significance, implying as it does a distant foreign connection.

H. APPENDIX

The analyses submitted below are the work of Dr. W. Harold Tomlinson, a geologist of Springfield Pa. His report is the result of the efforts of Dr. Marian Welker to obtain a technical description of certain Gawra wares necessary to some independent research which she was pursuing. The writer must acknowledge his indebtedness to Miss Welker for having placed this information at his disposal.

The numbers specified are the University Museum accession numbers, after which the Gawra provenance (Area A or Stratum XX) is given. The parenthetical descriptions of ware, shape, and paint which precede the technical descriptions were made

²³ T.G., Plate LXIII, Fig. 39. This late example has three necks.

by Dr. Welker and the writer. All sherds examined were of the Halaf type excepting No. 38-13-1018, from Stratum XX, which is of the Obeid variety, and No. 38-13-1061 (also from Stratum XX), which is an example of the undecorated, coarse pottery found in Strata XIX and XX.

No. 38-13-1096, Area A. (Rim fragment of a shallow bowl with flaring sides. Light brown ware; polychrome painted decoration in dark brown and purplish-red bands and cross-hatched lines. Probable height of vessel about 7cm.)

This sample was probably made from an alluvial clay without addition of filler or tempering material. The section shows a small amount of mineral fragments (sand) which were probably present in the clay. It is, of course, possible that these were added. Some of the grains are splintery in form rather than rounded as one would expect in sand. However, the assortment of grains is such as one might expect in alluvial clay. The fragments show an orientation, having their long axes more or less parallel to the sides of the vessel. The face of the vessel shows a thin film of some opaque material, probably some ferruginous paint. The clay is (after baking) high refracting, but has lost its birefringence. The composition is approximately as follows: clay (crystal structure destroyed by baking) 84%, quartz and feldspar (basic plagioclase in part) 6%, altered biotite 5%, hematite 2%, chlorite 1%, sericite, titanite, rutile, apatite, small fragments serpentine and chloritic slate traces. I can find no clue to possible firing temperature.

No. 38-13-1148, Area A. (Rim fragment of a shallow bowl. Buff ware with tiny white particles. Exterior decorated with red paint in bands; polychrome decoration on interior in a band of chevrons at the rim; below which are seven cross-hatched bands alternately in bistre and red.)

This sample contains 28% limestone filler or tempering material, 60% clay (by difference), and 12% sand. The sand was, in all probability, in the clay when the mix was made and not added separately. The nature of the sand is such as is found in most natural clay deposits. The filler can be seen with the naked eye as little white lumps about 2mm. in diameter. The limestone has been decar-

bonated in firing but has later absorbed carbon dioxide to form a finely granular mass of carbonate. The fragments have become roundish by the reactions and much lime has been disseminated through the porous structure of the vessel. No reaction was observed between the lime and clay. The clay is high refracting (after firing) but has lost birefringence. It seems probable that the small mineral fragments present were already in the clay and were not added as temper material. They are much finer in grain than the fragments of limestone. The composition is approximately: calcite (limestone) 28%, quartz and feldspar (in part basic plagioclase) 8%, hematite 2%, altered biotite 1%, chlorite, epidote, basaltic hornblende, small fragments chert and micaceous gneiss, traces. Firing temperature has been sufficiently high to dissociate calcite (825 degrees C.).

It is convenient to describe the following sherds from Stratum XX under three heads. (1) Clay, about which I can tell you little. This is originally composed of very minute flakes and fibres and colloidal matter, micas (usually hydrated), chlorite and clay minerals such as kaolin. After firing, these clays have the appearance of an isotropic mass containing a thick network of shreds or filaments. This is probably the result of loss of water, and results in a certain cohesion but without formation of determinable glass. (2) Sand, angular grains of quartz, feldspar, etc., and flakes of micaceous minerals sufficiently large to determine. These range in size from .02mm. downward. They were probably contained in the clay and not added separately. (3) Filler, fragments usually limestone, which were most probably not present in the clay and were added for temper. These range from .7mm. downward in size, and usually do not show evidence of sizing or screening.

No. 38-13-934, Stratum XX. (Pink ware with yellowish surfaces. Both surfaces decorated with reddish-brown painted bands; three of these occur as a curved group on the interior and seem to have formed part of a more complex motif.)

This sample contains about 78% clay, of which about 18% is fine sand, 22% limestone filler, of which about 6% represents a high refracting glass formed around borders of grains as reaction between

the clay and lime. The clay appears mostly isotropic, but contains flakes probably kaolinite. The composition of the sand is approximately as follows: quartz and feldspar (both orthoclase and plagioclase) 12%, biotite 5%, chlorite 1%, iron oxides (translucent brown) tr., one fragment mica gneiss. Sand is rather fine, .01mm. diameter or less. Filler consists of limestone fragments unevenly mixed through the mass. Limestone has been decarbonated and then largely recarbonated. Borders of grains show glassy material which I interpret as reaction between the lime and clay. This glass is not acid soluble. The firing temperature has been sufficient to decarbonate thoroughly the limestone.²⁴

No. 38-13-964. Stratum XX. (Rim fragment of a pot? Thick buff ware, rim shows traces of a *tournette*. Dull brown painted decoration on rim exterior in two straight horizontal bands enclosing a wavy band. The rim interior has a single straight horizontal band of the same paint.)

The sample is composed of approximately 84% clay and 16% filler. The clay appears isotropic with minute filaments. The sand is composed approximately of quartz and feldspar 12%, biotite (hydrated) 4%, iron oxides 1%, chlorite and sericite traces. Grain size .02mm. and under, coarser than No. 38-13-934. The filler consists of limestone that has been decarbonated and recarbonated. The grain of the filler is mostly quite fine, averaging about .1mm. A few grains are larger, up to .7mm. The grain is more uniform than in other samples examined. In process of recarbonation much of the lime has been leached out to the surface and carbonated so that there is a layer of lime carbonate just below the face of the vessel. Texture of sample is compact, and mixing of components has been rather thoroughly done. Firing has been sufficient to decarbonate limestone.

²⁴ In response to an inquiry, Dr. Tomlinson informs me that "according to Winchell pure lime carbonate dissociates at 900° C. However, most natural limestone contains a little magnesia and this may lower the temperature at which dissociation occurs by as much as a hundred degrees. Pure magnesium carbonate dissociates at 350° C.

"In using temperature of dissociation of limestone as a clue to firing temperature, one must assume that the filler was added as limestone and not as burnt lime. It might be possible that burnt or partially burnt lime was added as a filler instead of natural limestone."

No. 38-13-999. Stratum XX. (Fragment of a small, straight-sided bowl with wide, flat base. Shaped like Plate CXIX, Fig. 72. Light reddish-brown ware, wet-smoothed exterior. Undecorated exterior; interior decorated with dark brown paint in two bands encircling the vessel at the rim, the rest of the interior being covered with parallel bands, oblique to the rim bands.)

This sample is composed of 12% filler, 60% clay, and 28% sand. The clay is isotropic, thickly set with filaments. The sand has an approximate composition of quartz and feldspar (both orthoclase and plagioclase determined) 14%, biotite 12%, chlorite 1%, iron oxides 1%, one large fragment each of quartzite and rutile. Except for the few larger fragments the grain of the sand is fine, about .01mm. in diameter. The filler in this sample is very finely ground and well sized, the grain about .06mm. in diameter with a very few larger fragments. The limestone used appears to have been arenaceous, i.e., containing sand, etc. There is about 12% filler, although the calcite count is only 6%. Many of the filler grains show glassy borders. The texture of the body is quite compact and the body appears to be uniformly mixed. Firing was sufficient to decarbonate the lime.

No. 38-13-1018. Stratum XX. (Rim fragment of a bowl? Greenish-gray ware. Rim shows traces of *tournette*. Black painted decoration burned into the clay on the exterior showing part of a horizontal band at the rim and two wider vertical bands. Traces of a narrow painted band on the interior.)

This is composed of 20% filler, 71% clay, and 9% sand. The sample is quite hard and rather porous. It contains considerable calcite scattered all through in minute recarbonated grains, but shows no fragments that can be identified as filler. The clay is isotropic, thickly set with the usual filaments. The sand is composed approximately of quartz and feldspar 6%, biotite 3%. There is about 20% calcite which is distributed very irregularly through the body and probably represents recarbonated lime. The texture is very compact, but the body is porous. Firing has been at a high temperature, sufficient to melt orthoclase (grains of orthoclase in the sand are thickly coated with low refracting glass); this would be about 1,200 degrees C.

No. 38-13-1061. Stratum XX. (Fragment of an undecorated, flat-based vessel, apparently having round sides. Dark, mottled, pinkish gray ware with a dark gray core.)

This sample is composed of approximately 48% clay, 12% sand, and 40% marble. The clay is partly isotropic, partly flaky. The index is around 1.55 and the birefringence of the flakes about .01. This is in the range of kaolin. The sand is composed approximately of quartz and feldspar 4%, chlorite

6%, biotite 2%, sericite, tremolite, and hornblende, traces each. The marble is mostly very fine grained but shows absolutely no sizing. It may have been added to the mix, but I am inclined to doubt it. It seems to me more likely that the potter has taken a clay formed from decomposing marble. There are a few diatoms in the clay, and these would be likely to live in a limestone gumbo. This sample is quite soft, the texture compact. Firing has been low, not enough to decarbonate the marble.

V. TERRA COTTA OBJECTS

(PLATES LXXXI-LXXXVII; CLIII-CLVII)

The objects described in this chapter include the remaining clay products of the builders of Strata XX-IX, and of the people responsible for the accumulation of the débris in those areas adjoining the base of the mound which have been called Area A and Northeast Base. These terra cotta objects have been divided into two broad groups, the first of which includes models, chiefly those of humans and animals. The second group comprises those objects made of clay intended for specific use or application, such as spindle whorls, gaming pieces, and the like.

A. TERRA COTTA MODELS

(PLATES LXXXI-LXXXIII.a AND c;
CLIII-CLV, Figs. 1-23)

Human Figurines (Plates LXXXI; CLIII, Figs. 1-10). Human figurines occur almost exclusively in the lower levels of the mound, and in the soundings at the base of the mound. All are solid, rather than hollow. The human beings represented are almost always female, male figurines being extremely rare. Since the opposite is true of painted representations of humans on pottery and in the engraved designs on seals, we thus have an indication that these models possessed a specialized purpose, undoubtedly connected with the fertility cult. The present female figurines are, therefore, basically religious in conception, and may be considered as representations of the Mother Goddess common to many ancient and primitive cultures.

Nearly all specimens conform to a standardized type in which the woman is always represented in a squatting position, and is always shown holding her breasts, which are rather prominently modeled. Heads are merely pinched, but facial features are, in some cases at least, painted in to compensate for the lack of modeling. A typical example of this type of female figurine is shown in Fig. 1 (=Plate LXXXI.a), from the Northeast Base; eight additional specimens of this type were found in that sounding and in Area A. The illustrated specimen,

from which an arm and both breasts are missing, has the eyes (and hair?) drawn in black paint; other horizontal lines on the shoulders and arms may represent features of dress or adornment. On the feet are additional painted lines, as well as small appliqué pellets, perhaps indicating anklets. Identical representations were produced at Tell Halaf, Arpachiyah,¹ and Chagar Bazar² in the same period, the Tell Halaf examples in particular most closely resembling those from Gawra.³

Fig. 2 shows an old isolated example of an extremely conventionalized type of female figurine. This violin-shaped object, from Level B of Area A, shows the torso only; the arms and legs are not indicated, and the head is represented only by a short projection. The breasts are prominent, but are not overemphasized. All details of the lower part of the body, however, are unduly exaggerated, the contrast between the waist and hips being very great. Two sets of incised lines form a rough triangle below the navel, while the back is nearly flat. The occurrence of this stylized type of figurine alongside the more common, naturalistic form (Fig. 1) is noteworthy, since to judge them stylistically one might presume our present example to be the later of the two. As there is no chronological difference, however, the violin-shaped type is either an importation at a time when foreign influence was notably weak, or the stylization of the figure is deliberate and intended to serve some specialized function. For example, such figurines, as objects of good luck, may have been held by women in parturition, for which purpose both the shape and size of the present specimen would have been well adapted.

To turn now to the Mother Goddess figurines yielded by the stratified deposits of the mound, Fig. 3 (=Plate LXXXI.b), as well as Plate LXXXI.d,

¹ *Ar.*, Figs. 45-47.

² *MGB., Iraq*, Vol. III, No. 1 (Spring 1936), Fig. 5 and Plate 1.

³ *Halaf*, Plate 56, Nos. 1-3 and 5.

Nos. 3, 6, and 7 illustrate figurines identical with the specimen from Area A (Fig. 1). All were discovered in Strata XIX, XVIII, and XVII, and all are painted, usually over the necks and shoulders, brown or red being the usual colors. Black paint is sometimes used, but less frequently in these strata than in the earlier deposits of Area A and the Northeast Base. The heads of Fig. 3 and No. 3 of Plate LXXXI.d are missing, but Nos. 6 and 7 of the same illustration have the typical pinched heads encountered previously.

Plate LXXXI.d, Nos. 1 and 2 (Stratum XVIII), as well as Fig. 4 (=Plate LXXXI.c), from Stratum XVII illustrate an armless type of female figurine lacking the pointed knees of the earlier type. The breasts form an exaggerated feature of this variety of figurine, and although the heads are unfortunately missing from the present specimens, we may judge from the width of the break on Fig. 4 that these were somewhat more fully modeled than previously. A fragment of a somewhat similar female figurine from Stratum XV, Fig. 6, may illustrate the kind of head originally found on this variety.

Another major point of difference between the two types is exemplified in the painted decoration. In all instances of the present type the painted details appear to represent a short kilt or skirt, held by a band attaching in front to two straps suspended from the shoulders; these straps cross on the back between the shoulders, and again between the breasts. Additional painted strokes on the back and on the shins may indicate tattoo marks or cicatrices; while the four horizontal strokes on the lower part of the back of Fig. 4 may represent the spinal column. All these painted details are repeated on still another fragment from Stratum XVIII which is not illustrated here. It should be recorded that no truly steatopygous figurines, such as are known from other sites have been found at Gawra, nor do any of our female figurines possess the distended abdomens or protuberant navels found on like objects elsewhere.⁴

Stylized female figurines from the lowest levels of the mound are shown in Plate LXXXI.d, No. 5,

⁴ *Ar.*, Fig. 47, Nos. 1-4.

and in Fig. 5. The former was discovered in Stratum XIX, and is the only figurine with separated legs. Breasts—usually a prominent feature of all other types of female figurines—are not marked on this specimen, which is also armless and headless. The shoulders are shown as pointed projections, and the chest bears double-incised lines in a V-outline. The back of the object bears traces of painted lines.

Fig. 5 was found below Stratum XIX, and is extremely stylized. No anatomical details are represented on this specimen except for the breasts, while the head is indicated merely as a short knob, although part of this is missing. In fact, without the breasts this figurine would hardly suggest the human form, being flat and roughly elliptical in shape. Whether this object was intended to be held during the actual act of childbirth as suggested for Fig. 2 is questionable, for it is much smaller, measuring only 41mm. in height, although this does not preclude the possibility.

Strata XVI and XV produced two fragments of the early type of figurine, but no examples of the second, or later type, represented by Fig. 4. From Stratum XV, however, comes the fragment shown in Fig. 6, which is related to the second type; the points of correspondence are the prominent breasts, unrepresented arms, and the crossed painted bands (in red) on the back and between the breasts. One breast and the lower part of the body is missing from this specimen, but the head is fortunately intact, except for a small chip missing from the top, where a previous break had been repaired with bitumen. The head of this figurine is higher than any others heretofore described, and is a simple, rounded projection from the shoulders, slightly pinched in front to indicate the facial features. The eyes are represented by paint; not elaborately, as on the early type of figurine, but by simple dots. There is no hint in this fragment as to whether we have here the squatting type or the erect; however, since the latter are unknown at Gawra (except for the stylized examples which might possibly be so described), we may safely assume that the part now missing represented this woman in a squatting position.

Fig. 7 is with hesitation included here as a stylized Mother Goddess figurine. This object is in the shape of a cone and was found in Stratum XV; it appears to suggest the familiar squatting woman, particularly in the two projections at the base of the cone, which may represent the bent knees, but in all other details this object is only vaguely anthropomorphic. The appliqué bands at the middle of the object may be intended to symbolize the breasts, but it is difficult to recognize them as such, and there are no other details.

From Stratum XIII came four fragments of Mother Goddess figurines of which one is illustrated in Fig. 8. This fragment, showing a squatting woman, resembles Fig. 4 from Stratum XVII in treatment, and may be said to belong to the same type, although it is undecorated. Stratum XI-A yielded two out-of-place fragments of the earliest type of figurine, as well as the fragment shown in Fig. 9. This has a long, peg-shaped head, prominently modeled breasts, and a conical projection representing a shoulder. Part of an arm, apparently upraised, is attached to the other shoulder. Additional small fragments of the earliest type of female figurine were found in Strata XI and IX; these were unquestionably brought up from the lower levels, or had been found at the base or on the slopes of the mound, and have no particular significance.

By way of summary, our evidence tends to show that female figurines are most common at Gawra in the so-called Halaf period (Area A, Northeast Base, and Stratum XX). The type produced in that period is characterized by high, pointed knees, pinched heads, arms encircling the breasts, and by painted decoration on the head, and in bands across the neck and shoulders. A later type, represented by Fig. 4, is unknown in the two soundings at the base of the mound, but occurs with the Halaf type in Strata XIX, XVIII, and XVII. This variety is armless, has prominent breasts, and bears a characteristic painted decoration showing a skirt held by crossed straps on the shoulders. Knees are not pointed as before; instead, the laps of these figurines slope, and the legs are represented as being very short. Both types, in addition to exceptional stylized forms, are common in the lowest levels investigated

to date, but become progressively less numerous until they disappear completely near the end of the Obeid period, specifically, at the end of Stratum XIII.

A single male figurine was found in Stratum X (Fig. 10). This fragment, from which head, arms, and legs are missing, is undecorated save for a spot of paint at the end of the phallus. Found near the Stratum X Temple, in Square 8-J, this object may have had some use connected with that edifice.

Foot (Plate CLIII, Fig. 11). The foot-shaped object of sun-baked clay shown in Fig. 11 was found in Stratum XI-A. Owing to the nature of the material it was impossible to determine if this object had been broken off a larger one, or if it was complete. At any rate, the similarity to the shape of a human foot is too coincidental to be an accident, although its function is, of course, speculative.

Animal Figurines (Plates LXXXII, LXXXIIIa and c; CLIV, Figs. 12-22). It has been shown that the human figurines, which are with but a single exception all female, were objects with an underlying religious significance. By analogy, a religious character might also be assumed for the animal figurines, by which they could be considered as substitutes for votive offerings or the like. No uncontroverted proof has been obtained as a result of the excavations which would make such a theory impossible, but evidence was gathered proving that at least some of these animal models were merely toys. Two facts lead to this conclusion. First, very few of the animal figurines from any stratum were modeled with any care; indeed, in most cases the animal species is unidentifiable. If these objects had been made with the view to substituting them for actual animals in religious rites or practices it could most certainly be expected that enough skill would have been exercised to differentiate the model of a sheep, for example, from that of a goat, cow, or other animal, an expectation that is not borne out by the objects themselves. Second, in Stratum XVII an infant's grave was uncovered which contained the rattle shown in Plate LXXXII.b, No. 1, and the animal figurine, Fig. 12 (=Plate LXXXII.b, No. 2). This figurine is one of the few examples in which an attempt was made to

reproduce a specific animal form, or in which the type of animal is recognizable; the animal in this case being a mouflon. But its occurrence in a baby's grave proves that it had been used as a toy, such a function having only been assumed for them previously.⁵

Only one small animal figurine was found in the soundings at the base of the mound; this was a small (42 x 26mm.) model of a mouse (?) in black ware. It is, therefore, of interest to note that in those earliest deposits where human models were so common, animal figurines are extremely rare. Strata XX and XIX furnished no examples of animal figurines, and it is only in Stratum XVIII that the stratified deposits of the mound first yield an animal model. One specimen from that stratum is shown in Fig. 13. The size of this fragment, and the character of the break at its neck indicate that it was probably the knob of a lid or similar object, or even may have been part of a zoomorphic vase,⁶ for unlike all other animal figurines which are solid, this fragment shows that it had been attached to a hollow or double-surfaced object of some kind. The animal represented may have been a sheep; eye and other details are shown in red paint, only traces of which remain.

Additional animal figurines from Strata XVII and XVI are illustrated in Plate LXXXII.a; all are undistinguished examples of modeling. No. 1 shows a long-necked beast, possibly an onager or other variety of wild ass. If this identification is correct, our present figurine duplicates the subject of Plate CXXIV, Fig. 123; a Halaf sherd found in Stratum XVI which shows portions of the painted figures of two onagers.

Stratum XV yielded the amorphous example illustrated in Fig. 14, as well as Fig. 15, a ram. The latter is unusual in two respects. In addition to possessing black painted decoration in two bands, one encircling the belly and the other the neck, it is made of green ware, the usual colors being black or brown. An unillustrated specimen from Stratum XVIII had a similar band made of incised marks encircling its body. Possibly these represent bands of dye in the wool of the animals, and may be inter-

preted as ownership marks similar to the dyed spots and bands to be found on the sheep of Mesopotamia today.

Stratum XIII was more prolific of animal models than any preceding level, no less than nine having been recovered from that stratum. Most of these are either sheep or are unrecognizable. Fig. 17 shows a ram of brown ware, but the ends of the horns are missing. Fig. 16, however, is the leg of a large animal figurine or zoomorphic vessel, elaborately modeled and decorated in dark brown paint. The only bird figurines found in any of these strata was yielded by Stratum XIII. Made of gray ware, incomplete, and quite small (25 x 16mm.), it may have been broken off from a cult object used in the temples of this level. Possibly a dove was intended, in which case a connection with Mother Goddess worship would be indicated, but this is entirely conjectural. The object is unillustrated.

Animal figurines are only slightly less plentiful in Stratum XII than in the preceding level, but they are of far higher quality. An example from Stratum XII-A is illustrated in Fig. 18. The animal represented here does not appear to be of a domestic variety; quite possibly we have here the figure of a gazelle. Fig. 19 is another change from the standardized animal figure, for in this specimen a dog was undoubtedly intended, as proved by the upturned tail and long snout. Plate LXXXIII.c illustrates the only modeled representation of a member of the feline group; unfortunately only the forepart is preserved, showing a leopard advancing with forelegs slightly crossed and head lowered. The shoulders are humped, two nicks at the top of the head may indicate the ears, while two slight impressions in the face of the animal may have resulted from eye inlays of some material. The spotted coat of the beast is reproduced in brown paint. Compare also Plate CXXXV, Fig. 265, which shows a fragment of a ring-based bowl, also from Stratum XII, bearing the figure of a leopard.

Nine animal figures were recovered from the deposits of Stratum XI-A; all are crude, and most probably represent sheep (Fig. 20). Also from this level came Fig. 22, which must have been the spout of a zoomorphic vessel. This fragment is hollow, with the opening leading through the mouth of the

⁵ TG., 63.

⁶ Cf. *Ac.*, Plate V.a, and p. 38.

animal. Four dowel holes occur at the top of the head, two of which were for horns, and two for eyes. Additional details were worked out in brown paint.

Of the ten models of animals found in Stratum XI, two are illustrated. The first of these, Fig. 21, originally possessed longer legs than are now extant, ancient breaks in the legs having been repaired with bitumen. Identification of the subject is difficult, but it is possible that a dog or, more specifically, a saluki may have been the prototype. The second Stratum XI specimen is shown in Plate LXXXIIIa. We have no trouble identifying the subject here, largely because the tiny shells inlaid on the back of this figurine were undoubtedly intended to represent the wool of a sheep.

Plate LXXXIIc illustrates additional animal figurines from Strata XI, X-A, and X; all are notable only for their crudity, a characteristic of the Stratum IX animal models as well. They are nevertheless quite popular in all four strata.

To sum up: animal models are rare in the soundings at the base of the mound, and in Strata XX and XIX; in other words, in deposits dating to the Halaf period. Although common in all other strata, animal figurines are most popular in Strata XIII through IX. The animals most usually reproduced in terra cotta are sheep and dogs, but single examples of the wild ass, gazelle, and leopard were found. Thus, while the two most common animals of primitive times are reproduced most frequently in these shaped pieces of clay, other kinds of beasts were not excluded. On the other hand, no reproductions, or recognizable reproductions, of boars or pigs have been discovered, although the presence of worked boars' tusks in the tombs proves their existence. No terra cotta models of cows or bulls were found in any stratum, but Stratum XVIII and XVI produced three pendants in the form of bukrania which are described in Chapter VII (cf. Figs. 60 and 61 of Plate CLXXIV, and Plate XCIIc, No. 4). Only one model of a bird was discovered.

Wheels. Three unillustrated discs, perforated through the middle, were found in Strata XIX and XVIII. They may have been made as models of wheels or for some other purpose. All three of the

discs measured about 31mm. in diameter, and from 7 to 11mm. in thickness. Two were decorated with brown paint on the rims, while the third also bore a "spoke" design on both surfaces. Three sherds, cut into a roughly circular shape and bored through their centers, were discovered in Area A; these may also belong under this heading, but the wheel shape is a simple one, and all of these objects from the early deposits of Gawra may have had a totally different function. Stratum XIII yielded the only model wheel that may with any degree of certainty be described as such. This object had the projecting hubs characteristic of later model wheels,⁷ and was much larger than its possible prototypes from underlying strata.

It is significant that Strata XI through IX, and particularly the latter, did not furnish a single example of a model wheel, for although they were rare in Stratum VIII compared to still later strata, no less than fourteen examples were recorded from that layer, which number increased to no less than sixty-three in Stratum VI.⁸ On the basis of this stratigraphic distribution it was concluded that "chariots were still comparatively rare in Stratum VIII, but gradually gained in popularity until they became typical of the civilization represented by Stratum VI. . . ."⁹ Consequently, with no model wheels having been attributed to the builders of Stratum IX, it may be further assumed that the chariot was first introduced in Stratum VIII, with the possibility, however, that it may have arrived at the same time in a late phase of Stratum IX as the potter's wheel, but left even less evidence of its presence in that stratum than did that revolutionary device.

Hammer-Shaped Object (Plate CLV, Fig. 23). A model of curious shape, in general outline not unlike a hammer with a pointed head and flat butt, is shown in Fig. 23. Found in Stratum XV, it is pierced through the middle where it attains its greatest thickness, and precisely where a hammer would be hafted. It is decorated with light green (originally bistre?) painted bands. No object of similar shape in any material has yet been found

⁷ T.G., Plate LXXVIII, Nos. 6 and 8.

⁸ *Ibid.*, pp. 75-76.

⁹ *Ibid.*, p. 76.

at Gawra, while the fact that the butt of our supposed model hammer is hollow would seem to be an additional contravention. However, for convenience it is here described as hammer-shaped until its actual prototype or character can be determined.

B. MISCELLANEOUS TERRA COTTAS
(PLATES LXXXIII.b, d-g, LXXXIV-
LXXXVII; CLV-CLVII, Figs. 24-72)

In the preceding section we have dealt with terra cotta models having three mutually exclusive functions: (1) those with an underlying religious significance; (2) toys; and (3) simple reproductions having no practical application. The remaining objects of terra cotta are utilitarian in nature, and lack the miniature character of the preceding group; they include spindle whorls, gaming pieces, mullers, loom weights, etc.

Spindle Whorls (Plates LXXXV; CLV, Figs. 24-46). This is the largest single class of terra cotta objects, a fact which attests to the importance of textiles in prehistoric times. Conforming to the chronological sequence followed heretofore, we shall consider first those spindle whorls found in the two soundings at the base of the mound. These number only eleven, of which five were biconical, two conical, one spherical, and two hemispherical. The remaining specimen had a rounded lower part and conoidal top. These, and all others from the mound which will be described below, possess but a single hole through the middle, and all were of brown or buff ware. None was decorated in any manner, and all are quite small, ranging from 20 to 25mm. in height and from 25 to 36mm. in width.

Stratum XX yielded no spindle whorls whatever; it should be remembered, however, that only an insignificant part of this level has been excavated, and there is no reason to doubt that spindle whorls are to be found in unexcavated sectors. Whorls from Strata XIX and XVIII are of the same types found in Area A and the Northeast Base soundings, although several specimens had nicked edges.

No whorls were found in Stratum XVII, perhaps due to an accident of excavation, while only two were discovered in Stratum XVI, which are illustrated in Figs. 24 and 25. Both have a conoidal shape, but Fig. 25 is interesting for its incised star

design, while Fig. 24 presents a new type characterized by a concave base.

Another gap in our evidence is presented by Stratum XV. Stratum XIII, however, compensates for the paucity of spindle whorls in the preceding levels, no less than fifty having been discovered in that layer. Such a tremendous increase is especially remarkable when it is remembered that Stratum XIII, so far as we know, was occupied entirely by temples. Possibly technical improvements were made at this time which led to an increase in the manufacture of textiles, and necessitated the spinning of more thread, but we have no direct evidence of such an advancement, and the common occurrence of spindle whorls in a level devoted to religious edifices remains unexplained. Figs. 26-32 illustrate the various types found in Stratum XIII; it will be noted that decoration, usually incised, has by this time become more common. Conical and biconical whorls are the most usual, but a ring-shaped type with rounded sides, and occasionally with a single projecting hub is frequently found.

In Stratum XII spindle whorls become virtually ubiquitous (Figs. 33-38; Plate LXXXV). In this level undecorated whorls are a rarity, the standard whorl bearing incised or punctured decoration, while a single exception (Fig. 33) bears an appliqué design. The antlered animal incised on the specimen shown in Plate LXXXV, No. 2 is unique. It is a curious fact that in this stratum, where painted pottery was so common, only a single whorl (*ibid.*, No. 8) bore painted decoration. No other painted spindle whorls have been noted in any Gawra deposits.

Conical and biconical whorls are the most usual types; the truncation of the latter variety is now more emphasized than before, and is a development which is continued in later levels. As heretofore, most whorls are of brown, buff, or reddish brown wares.

In Strata XI-A and XI whorls continue to be plentiful, but there is no form which may be described as biconical, most specimens conforming to a conical or thick ring shape (Figs. 39-42). Plain whorls continue to be exceptional.

The whorls produced in the remaining strata of X-A, X, and IX are fewer than those from any

level since Stratum XIII; they are, moreover, characterized by a crudity of outline (Fig. 43) and by an increase in the number of plain specimens. Decoration commonly consists of short incised lines on the edge of the object or upon one surface (Fig. 45), or is punctured as on Fig. 46. The bossed, conical whorl shown in Fig. 44 is rather unusual, being representative of only two or three more from Stratum XI and the three strata overlying it.

Nail-Shaped Mullers (Plates LXXXIII.f, Nos. 2, 4-6; LXXXIII.g; CLVI, Figs. 47, 49, 54). These objects are featured by a curved (Fig. 49) or sharply bent (Fig. 47) conical shaft, and a wide, convex head; a shape which altogether resembles a bent nail. The straight shaft of Fig. 54 is unusual. Almost all are made of well-baked wares; those from the lower levels are usually brown in color, while the specimens from Strata XIII and XII are green. No. 5 of Plate LXXXIII.f (from Stratum XVIII) is made of white marble, but since it is the only specimen of this type to have been made of any material other than terra cotta it has been included in the present discussion. Exceptional painted examples occur (Plate LXXXIII.g, No. 2, and Fig. 54); such decoration is always applied to the shaft.

The function of these objects has been the subject of some speculation, with various suggestions having been made ranging from decorative wall pegs, paint grinders, and sickle hand protectors¹⁰ to model bulls' horns.¹¹ Of these, the only one which appears plausible is that they were employed as a grinding tool, or muller. The shape of these objects would be well adapted to such use, for they could have been held by the shaft, whose curve would well fit the hand, with the tip bending over to cover the thumb, or to afford a thumb-rest. Lending color to this theory is the fact that at Gawra (and elsewhere) the convex heads of these nail-shaped objects quite often show signs of wear and abrasion. Whether their use was restricted to the grinding of paints, or whether they were a household tool adaptable to a variety of grinding uses, which seems more likely, it may be regarded as certain that these objects had no decorative or

votive significance, for their horizontal distribution in the various strata of Gawra shows that they occur only in secular buildings.

The vertical stratigraphic distribution of these grinding tools may be summarized as follows: Area A and the Northeast Base, none; Stratum XX, none; Strata XIX and XVIII, seven; Stratum XVII, one; Stratum XVI, two; Stratum XV, none. Stratum XIII produced the peak number of seventeen, which is reduced to a mere two in Stratum XII. They are, therefore, characteristic only of the period producing the Obeid painted wares, being unknown in the preceding period, as well as in Strata XI-A through IX.

Cones (Plates LXXXIII.f, Nos. 1, 3; CLVI, Figs. 48 and 50). The few objects included under this heading are again characterized by a nail-like profile, but in this class of objects the shafts although conical are never bent, and are surmounted by a slightly wider, bowl-like head (Fig. 50). Painted decoration is usual, occurring as bands across the width of the cone from the concave head to the point.

Only four examples of these cones were found,¹² two from Area A and two from Stratum XVIII; it thus seems probable that they are characteristic of the (late?) Halaf period. Consequently the cones are earlier than the nail-shaped mullers described above, and the two types seem, furthermore, to be typologically and functionally unrelated. The purpose for which these cones were made is, however, unknown; possibly the concave head was intended to contain a pigment or inlay; if so, the cones were used as decorative wall pegs similar to those found in Southern Mesopotamia in much later times. In contradiction to this theory, however, is the fact that no traces of such pigment or inlay has been found in these objects, nor have any cones been found *in situ* in building walls. Furthermore, if they had been used as architectural decoration one would expect to find them in far greater quantities. Again, if the shafts were to have been embedded in a wall, it is highly improbable that the ancient potter would have covered that part of the object with painted decoration. All of these factors tend to show that

¹⁰ *al-'Ubaid*, pp. 48-49.

¹¹ *Ar.*, p. 90.

¹² *TG.*, Plate LXXV, Fig. 210 shows an unstratified specimen.

some other explanation must be sought, which will be forthcoming only on the basis of additional evidence.

Included in this group because of its conical shape is Fig. 48, from just outside the Round House of Stratum XI-A. The obvious points of difference between the shape of this object and Fig. 50 need not be stressed, nor the lengthy period of time separating them. Like the earlier cones with bowl-shaped heads, the use of this object is uncertain.

Gaming Pieces (Plates LXXXIII.b, LXXXIV; CLVI, Figs. 51-53, 55-58). Terra cotta gaming pieces were found in every level from Stratum XIX through XIII, and in Strata XI-A, XI, and IX. The earliest gaming pieces discovered at Gawra are nine small, crudely shaped cones found together in Stratum XIX. These were of two sizes, the larger averaging 16mm. in height, while the small pieces measured 11mm. Next in stratigraphic order come the objects shown in Plate LXXXIV.c, found in an adult's grave (Locus 7-58) in Stratum XVIII. Only a selection is shown in this illustration, a total of thirty-four having been uncovered at the hips and chest of the occupant of this grave. These objects are interesting not only because they were found in a burial, and for their profusion, but also because they bear some resemblance to the nail-shaped mullers described above which are, however, much larger and harder.

Stratum XVI produced the most interesting and important group of gaming pieces, of which most belong to a hitherto unknown anthropomorphic type (Figs. 52, 53, 55-58; Plate LXXXIV.b, Nos. 1-3 and 6). These were not found in a single cache, but were scattered throughout the stratum, so that the exact composition of a single set of these pieces is unknown. A fragment of a similar gaming piece (unillustrated) was found in Stratum XVII, another unillustrated specimen came from Stratum XVI, while two others, shown in Plate LXXXIII.b, were discovered in Stratum XIII. Thus a total of fourteen specimens of the anthropomorphic type of gaming piece was discovered, of which nine were yielded by Stratum XVI, although the stratigraphic range of the type appears to include Strata XVII through XIII.

The anthropomorphic character of these gaming pieces is best illustrated by the two complete examples from Stratum XVI shown in Figs. 52 and 58 (=Plate LXXXIV.b, Nos. 1 and 2), and by the pair from Stratum XIII appearing in Plate LXXXIII.b. No. 2 of the latter illustration is unique in that the top of the head bears a double coil, giving a turban-like effect. No. 1, *ibid.*, as well as Fig. 53 (=Plate LXXXIV.b, No. 6) have bands which encircle the waists. All have wide, concave bases; wide, pointed shoulders, and heads which, although they are extremely stylized, have nevertheless been modeled to a degree, and are not merely pinched as was the case with certain of the human figurines. It is also characteristic that all of these objects have curved backs, and that all show the head thrust forward.

That we are indeed dealing with gaming pieces, and not with simple human figurines is proved not only by their stylization, but by their bases which are unlike any Gawra type of figurine, and are obviously adapted to the surface of a gaming board. In addition, these anthropomorphic gaming pieces are smaller than any of the human figurines, measuring only 35 to 50mm. in height. The entire group appears to be composed of two varieties, one having the thick waistband, and the other without; these, like our present-day chessmen, may have had different values or movements assigned to them, or they may even have been the components of different games.

Also from Stratum XVI came three conical gaming pieces, ranging from 20 to 39mm. in height, which may have been used with the anthropomorphic pieces described above. Stratum XIII yielded the conoidal object with knobbed top shown in Fig. 51.

An interesting and possibly complete set of gaming pieces was recovered from the debris of Room K of the Round House in Stratum XI-A (Plate LXXXIV.a). This set is composed of six bottle-shaped, two pyramidal, and two hemispherical objects, all of which are crudely made.¹³

The strata above XI-A produced very few terra

¹³ Cf. also the stone gaming pieces from this stratum described in Chapter VIII, p. 205, and illustrated in Plate XCVI.a.

cottas which may be described under the present heading. Six small spheres were found in one hoard in Stratum XI which may have been employed in some game, but no gaming pieces of any description were discovered in Strata X-A and X. Three spheres and discs were found in various parts of Stratum IX. A shift from terra cotta to stone gaming pieces seems to have taken place at about the time of Stratum XI; cf. Chapter VIII, p. 205.

"*Hut Symbols*" (Plates LXXXVI.a; CLVI-CLVII, Figs. 59-67). These curiously shaped objects are found almost exclusively in Strata XI-A through IX, for of the total of twenty-eight terra cotta and three stone specimens yielded by Gawra, twenty-five were discovered in those four strata. One atypical, single-holed specimen (Fig. 67) came from Stratum XVI, and three were found in Stratum XII. Two, both made of stone, were discovered in a tomb (No. 31) attributed to Stratum VIII-C.¹⁴ In Strata VIII-B through I they seem to have been completely unknown.

The majority of the specimens are characterized by a hollow, bell-shaped base (Figs. 59-65). Most typical are the two rings, or volutes, at the top which are present on every one of the present examples excepting Fig. 67, from Stratum XVI. This object, which is made of coarse, unbaked clay, and has an irregular shape, possesses only one hole. Possibly it is to be considered the prototype of the other, later specimens, but it is equally possible that despite some resemblances in outline, the Stratum XVI example belongs to another class of objects, having a different function. A similar, single-holed object was produced by Stratum XII (Plate LXXXVI.a, No. 6). Fig. 64 from Stratum IX, on the other hand, may be an aberrant form in which the volutes have been reduced in size, and have been widely separated. Plate LXXXVI.a, Nos. 5 and 7, and Fig. 66 illustrate a third type. This variety has double openings, but the profile is simpler, consisting merely of a flat base, flat sides, and a rounded top without volutes.¹⁵ Fig. 66 is made of

an unidentified material, possibly terra cotta, or possibly an odd kind of stone.¹⁶

All these single- and double-voluted objects are undecorated; the incisions on the tops of the volutes of Fig. 59 may perhaps be described as a form of decoration, but it is more likely that they served some other purpose. Coarse, crudely shaped specimens with irregular outlines are the rule rather than the exception, and although some well-baked specimens occur, many are made of coarse clay, either baked at low temperatures or inexpertly fired (Plate LXXXVI.a, No. 2).

In describing these objects as "hut symbols" we have followed, for the sake of uniformity, the identification given them in Volume I of this series, but the circumstances of discovery, as well as the internal evidence afforded by our present group, would seem to discredit the theory that these objects are sacred symbols of the archaic Reed Hut Sanctuaries mentioned in Sumerian literature.¹⁷ In the first place, no other kinds of cult object are found at Gawra in the numbers in which these "hut symbols" appear, and it may be doubted that it would be necessary for any single stratum to possess eight such objects (as in Stratum XI), if they were indeed used for ritual purposes. Second, not a single member of the present group was found within a temple or shrine of any level. Third, it may be doubted that these are cult objects on the basis of their material alone, which too often consists of poorly baked, coarse clay. Fourth, if these objects had been made as cult symbols and intended for use in temple ritual, it could certainly be expected that much more care would have been expended in their manufacture, for most of the specimens have unfinished surfaces and are extremely irregular in outline. Fifth, if they are to be connected with the Sumerians it is unlikely that they would completely disappear in Stratum VIII, an occupation level which is separated only by Stratum VII from the

¹⁴ See TG., Plate XLIV.c, and pp. 99-100 for a similar stone specimen from Stratum IX.

¹⁵ TG., Plate LXXX. No. 4 shows an object of similar shape from Stratum VIII.

¹⁶ Mr. Bache, its discoverer, describes it in the field catalogue as having "a specific gravity lower than that of water, and of a material said by the natives to be used in the manufacture of smoking pipes and cigarette holders."

¹⁷ Advanced by Dr. Walter Andrae, *Die Ionische Säule*, Berlin, 1933.

Early Dynastic Period. Sixth, as symbols of Reed Hut Sanctuaries, an extreme stylization resulting from a long history must be presupposed, yet there is no internal record, at Gawra at least, of any evolution in the form of these objects towards stylization. As a matter of fact, with but a single exception which may not even belong to this group (Fig. 67), all examples were found in Strata XII through VIII, and almost all conform to the same general outline throughout these levels.

These six reasons impel a search for some other explanation, but it must be confessed that no facile interpretation is forthcoming on the basis of the Gawra evidence alone. The fact that this type of object was made in comparatively large numbers, and in common clay, would seem to hint that their function was utilitarian, and that they had some practical, everyday use.¹⁸ In apparent support of this theory, it should be noted that one of these double-voluted objects (Plate LXXXVI.a, No. 2) was found with such household implements as a rubbing stone, a stone hammer, and a large jar; all of which lay on a woven reed matting on the floor of a private house (Room 23, Stratum XI).

The stone "symbols" from Tomb 31, described in Chapter II, and illustrated on Plate LII.b, have faint grooves between the volutes, and crossed grooves leading diagonally from the volutes to their narrow waists, marks which suggest that these specimens may have been bound in these grooves, and through the volutes. If this supposition is correct, then it would appear that these objects were used as suspended weights, perhaps in weaving. The objection may be made that the much more numerous terra cotta "hut symbols" show no such grooves, but it will be observed that they have slightly different forms from their stone analogues, in which the volutes are larger, so that these clay objects did not require the cross-binding, and were apparently suspended only by means of their volutes. Another detail requiring explanation is the fact that double volutes were always made, when a single hole would seemingly have served the same purpose. It may be supposed, however, that the double volutes are a specialization necessitated by some now un-

known factor; perhaps in the construction of the loom, or perhaps by the weaving technique then practised.¹⁹

On the other hand, certain objections may also be raised against the loom-weight interpretation just advanced. First, if they are loom-weights, why were such lowly objects included in the rich furnishings of Tomb 31? Second, the specimen illustrated in Fig. 62 would seem to be too small and light to have been used as a suspended weight. Lastly, Mr. Mallowan has discovered at Tell Brak, in Northwest Syria, large numbers of apparently analogous objects, forming part of a foundation deposit below a "tower-platform" of Early Dynastic or Jemdet-Nasr date.²⁰

These objections, however, are less valid than those made against the "hut symbol" interpretation. To deal with them individually, the two specimens found in Tomb 31 were made of stone, and are carefully shaped and finished. They are two of the finest examples of this type of object yet discovered at Gawra, and as such may have been considered worthy of a place among the tomb furnishings. Such a circumstance would be even more plausible if it could be assumed that the person occupying Tomb 31 was a weaver, but such a hypothesis is completely devoid of a factual basis. Second, Fig. 62, although much lighter and smaller than its counterparts, may nevertheless have found some employment in the weaving process, having perhaps some specialized function not shared by the larger and heavier double-voluted objects. Third, the objects found at Tell Brak are much later in date than the Gawra specimens. They are, furthermore, obviously amulets, as indicated by their size, which ranges from 4 to 6.5cm., and by their material, which is always alabaster or other kinds of stone. Stylistically, the Tell Brak objects appear to be superficially related to the Gawra specimens, but certain features, such as their multiple "eyes" and

¹⁹ Speiser, *BASOR.*, 62, pp. 10 and 12, discusses Col. N. T. Belaiew's suggestion that these objects represent scale weights, pointing out that "it is difficult to see any practical value in weights made of so fragile a material as terra cotta."

²⁰ *ILN.*, October 15, 1938, Figs. 4, 12, and 15; and *British Museum Quarterly*, Vol. XIII, No. 1 (1938), pp. 22-23, Plates XIII.b and XL.a.

¹⁸ *BASOR.*, 62, p. 7, where Mr. Bache expresses the same opinion.

engraved decoration, have no parallel at Gawra. The "eyes" of the Tell Brak objects are, moreover, never pierced through, being instead inlaid with paint or pigment.

How the superficial similarity in form, and the more important differences in date, size, material, and function presented by the Tell Brak and the Gawra objects are to be explained, is at present an insoluble problem. It is possible that there is a connection between the two types, but such a relationship cannot explain the size, choice of material, lack of craftsmanship, and circumstances of discovery of the Gawra terra cotta objects, which factors indicate, as we have argued above, their use as loom-weights.

Cult Objects (?) (Plates LXXXIII.d; CLVII, Figs. 68, 69) illustrate terra cottas of hitherto unknown types and obscure functions. The double-horned variety represented in Fig. 69 has been found in Strata XII, XI-A, XI, and IX. Of these strata, XII and XI yielded two specimens each, one of the Stratum XI objects being associated with a cache of ovoid sling pellets (Plate LXXXVII.b). The double-horned clay objects have flat bases, nearly circular in plan, with one side flattened. The horns are always set, not in the center, but above the straight edge of the base (Fig. 69). These objects are usually pierced diagonally in three places, with double piercings below the horns on both sides of the object, and a group of three piercings in front. One of the Stratum XII horned objects, however, had horizontal rather than diagonal holes, which extended only 50mm. inside the object. Moreover, it possessed only two pairs of holes, one pair on each side. All specimens were made of sun-baked clay.

Fig. 68, from Stratum XI, and the similar specimen appearing on Plate LXXXIII.d, found in Stratum IX, illustrate a second variety made of the same material, and characterized by flat bases, solid hemispherical bodies, surmounted by flattened knobs. A third specimen from Stratum X or X-A is not illustrated. In the case of the Stratum XI specimen, a prominent feature is the three groups of diagonal piercings near the base of the object, identical with those on the double-horned type just described. This has in addition, however, a double impression in the center of the small knob. The object of identical

shape shown in Plate LXXXIII.d lacks all of these details.

The purpose for which both types of objects was made is even more difficult to determine than for the "hut symbols" discussed in the preceding section. They are here tentatively and rather ambiguously interpreted as cult objects, but many of the objections raised against identifying the double-voluted objects as "hut symbols" may be applied here. For example, none of these objects of either type, double-horned or knobbed, was found within a temple, while all are made of poorly baked and crudely shaped clay. Nevertheless, there is a possibility that these objects do possess some obscure cult symbolism, a possibility that only additional evidence can confirm or rule out.²¹

Buffers or Smoothers (Plate LXXXIII.e). These occur chiefly in the form of sherds cut into oval or elliptical shapes, and have been found in Area A, as well as in most levels of the mound. In Plate LXXXIII.e a modeled type of smoother or buffer is illustrated, formed of a rectangular base surmounted by a short conical knob. Both specimens were found in Stratum XVII.

Sling Pellets (Plates LXXXVI.b, LXXXVII). Clay sling pellets were usually found in caches composed of from twenty to one hundred and fifty specimens. Three types of these sun-baked objects were found. The first and most common is ovoid in shape. Examples of this type have been found in Strata XVI, XIII, XI-A, and XI, as well as in Stratum VIII and still later levels,²² but they are plentiful only in Strata XI-A and XI, in which strata no less than nine separate caches were found. These sling pellets usually measure about 45mm. in length and 30mm. in diameter. In two cases, ovoid sling pellets were found associated with "cult objects" of the horned type, a circumstance which may suggest that the horned objects had some utilitarian function (cf. Plate LXXXVII.b).

The second type is cigar-shaped, measuring from 10 to 15cm. in length, and from 2 to 3cm. in diameter (Plate LXXXVII.a). They were made

²¹ On Plate LXXXVII.b a double-horned object is shown lying near a cache of terra cotta sling pellets. Mr. Bache, in the field notes, referred to this object as a "loom-stand," but did not advance his reasons for so identifying it.

²² TG., 80.

by rolling flat cakes of mud, with the result that the ends of these objects are sometimes open. Like those of the ovoid type, these sling pellets are common in Stratum XI, but a single cache was discovered in Stratum XII. It is difficult to see just how these objects were employed as sling pellets, for they would seem too long to have been an effective projectile. Although nail-shaped, however, they cannot have been used as wall decorations, for all are of comparatively soft, sun-baked clay.

The third type is illustrated in Plate LXXXVI.b, and has been found only in the Stratum XIII Well, which produced a few dozen. These are long and hand-squeezed; the impressions formed by the fingers being their outstanding feature. Does the fact that these were found in the Stratum XIII Well, whose use can be connected only with the Temples of that stratum, suggest that these are not sling pellets, but perhaps votive offerings instead?

Rattle. The rattle shown in Plate LXXXII.b, No. 1, was found in an infant's grave in Stratum XVII together with the animal figurine illustrated

on the same plate. The object is gourd-shaped, with a solid handle; the hollow, spherical end contained five small clay pellets.

Varia (Plate CLVII, Figs. 70-72). The stamp shown in Fig. 70 was found in dumped earth, and is therefore of uncertain provenience. Pyramidal in shape, and pierced at the top for suspension, the base bears ridges in the form of two rectangles, one enclosed by the other. Fig. 71 is a loaf-shaped object of terra cotta from Stratum XIII. The reason for the incised decoration on one surface, as well as the function of this object, is unknown. The clay jar stopper shown in Fig. 72 comes from Stratum XIII, while a similar, unillustrated stopper was found in Stratum IX. The sole remaining terra cotta requiring description is a flat object, pierced through the center, and ovoid in plan, with slightly elongated ends. This object, which is unillustrated, measured 60 x 42 x 12mm. It was found in Stratum XV, and may have been used as a shuttle, but the shape is not sufficiently specialized to justify a precise identification.

VI. SEALS AND SEAL IMPRESSIONS

(PLATES LXXXVIII, LXXXIX; CLVIII-CLXX)

The extensive collection of seals and seal impressions found in Strata XIX through IX, and in the soundings at the base of the mound, is entirely of the stamp variety. No cylinder seals were found in any of these levels or deposits; in fact, they are unknown before Stratum VII.¹

Gawra in the periods covered by this volume was extraordinarily rich in seals and seal impressions. Close to six hundred specimens were found, a figure that does not include multiple impressions of the same seal. Possibly the fact that Gawra was through most of its history an important religious center may—at least in Stratum XIII and the levels succeeding it—partially explain the extremely common occurrence of seal impressions, for they were probably to be found on almost all pieces of portable property brought to the temples as offerings. For example, the Stratum XIII Well, whose use can be connected only with the Eastern Temple of that level, yielded a considerable number of seal impressions. Moreover, only part of this Well has been cleared, so that it may safely be assumed that more glyptic material is still contained within it.

Apart from the Stratum XIII Well, most seals and impressions were found scattered throughout occupational debris, with only a single seal coming from the burials in Strata XVII-XIX (Fig. 140, Locus 7-66). The even more numerous graves of Stratum XII likewise supplied only one seal, which is unillustrated. This was found in an urn burial, and was of hemispheroidal shape; it bore a design like that of Fig. 26. No seals were discovered in the three graves uncovered in Area A. The seals found in the tombs have already been discussed; cf. Plate CVI, Figs. 35-39, and Chapter II, pp. 86-87. The southwestern sector of the mound, investigated in Strata X-A through XII-A by means of a trench extending from Square 7-M to the southwestern edge of the mound, proved extremely productive of seals and impressions. Only scraps of walls were encountered in the trench in

any of these four levels, indicating that this portion of the mound was unoccupied and was used as a dumping ground in the period represented by Strata X-A-XII-A.

As regards the vertical, or stratigraphic, distribution of the glyptic material, seals, although found in all levels and deposits except the incompletely excavated stratum of XX, first come into extensive use in Stratum XIII. The succeeding strata of XII, XI-A, and XI, however, are the most productive, no less than two-thirds of all seals and impressions found at Gawra having come from those three layers. The remarkable expansion of the glyptic industry begun in Stratum XIII, but carried to its maximum extent in the period represented by Strata XII-XI, is particularly notable because all the early building levels and deposits investigated so far, both on the mound and at its foot, altogether yielded no more than fifteen seals and impressions, while Stratum XIII alone produced three times that number. On the other hand, the three strata overlying XI, namely X-A, X, and IX, reveal a marked decline in the popularity of seals, a decline that is immediately apparent in Stratum X-A. These three strata contained but one-fifth the number of seals and impressions found in the two strata of XII and XI-A; as a consequence, the period of expansion of the glyptic industry is sharply delineated and limited to Strata XIII, XII, XI-A, and XI.

Two factors may account for the sudden rise in popularity of seals in Strata XIII-XI. First, it was observed in Chapter I that the Gawra settlements of XII, XI-A, and XI were more extensive than those of underlying strata, and thus contained larger populations. An increase in the number of seals, as well as other objects, might therefore normally be expected in them. In regard to Stratum XIII, it will be remembered that this level was occupied solely by temple buildings; consequently seal impressions on temple offerings may well account for the increase noted in this stratum. On the other hand, the settlements of Strata X-A and X were only

¹ TG., 120.

slightly less extensive than those of the three preceding levels, yet the number of seals and impressions found within them represents but a small fraction of those found in XII, XI-A, and XI. It is evident, therefore, that population expansion in the strata in question is only part of the explanation.

Second, the stratigraphic distribution of stone objects—discussed in Chapter VIII—is there shown to parallel that of seals and seal impressions, with the same marked increase in numbers apparent in Stratum XIII, while the peak of production is reached in the following stratum. As almost all Gawra seals are made of stone, the coincidence of the two frequency curves is not surprising. But what is more important is the fact that most of the varieties of stone used in the manufacture of seals (such as steatite, serpentine, lapis lazuli, agate, carnelian, haematite, and obsidian) are not to be found in a native state in Mesopotamia, and must have been imported from some distant source. Consequently, the possibility is suggested that an expanded production of seals first became possible in Stratum XIII, with the opening of new trade relationships with eastern mountain areas permitting the importation of desirable types of stone not otherwise available, or with the enlargement of previously existing contacts with the same highland area.

Obviously seals could have been manufactured, and a few were, of other materials at hand, or readily obtainable by the inhabitants of Gawra at all times, such as bone, paste, terra cotta, and even wood. These materials, however, were not as desirable as stone because of their friability and their tendency to wear quickly. Thus the ideal material for seals was considered to be stone which possesses none of these disadvantages; in addition, black steatite—from which the majority of our seals were made²—is a variety of stone soft enough to be cut without difficulty. Certain kinds of stone, to be sure, were obtainable in the neighborhood of Gawra, yet these varieties were not suitable to the manufacture of seals. Marble, for example, occurs in the vicinity of Mosul, but is harder than steatite, and

it must have been difficult for the seal-cutter to follow his design in the variegated mass of this type of stone. Basalt and granite, which occur in the neighborhood of Gawra, were even more impracticable because of their crystalline structure.

While the two factors discussed in the preceding paragraphs may have resulted in the increased manufacture and use of stamp seals in Strata XIII through XI, the reason for their decline in popularity in Strata X-A through IX must still be sought. Perhaps the trade relationships established in Stratum XIII were broken off because of war or some other factor, or the previously existing cultural influences from the east may have been largely superseded in Strata X-A through IX by influences from another direction. On the other hand, the reason may have been an internal one, for it is possible that the interest of Gawra craftsmen turned from seals to other types of objects in Strata X-A-IX. The evidence supplied in this connection by the objects from the tombs seems to support this surmise, for the tombs attributed to the strata under discussion contained almost no seals (or pottery); instead, gold artifacts and stone vessels are more common tomb furnishings. A shift in technological emphasis, rather than a cultural decline, seems to be the best interpretation of the facts, but whatever the explanation, seals at Gawra never regained their former popularity or importance.

The glyptic material from Gawra furnishes some evidence bearing on the evolution of the stamp seal. The theory has long been advocated that the stamp seal was developed from buttons used on clothing.³ Such buttons are particularly well known in Elam, where they usually have the shape of circular discs with small back-loops, the disc bearing a characteristic decoration composed of crisscrossed lines or geometric patterns. Originally these buttons were used as clothing fasteners, and not as seals, that function having been evolved in a later period.⁴ At Gawra only five examples of back-looped buttons

² Close to 60% of the nearly 200 seals found in Strata XIII-IX were made of steatite and serpentine. On the other hand, only three of the ten seals found in Strata XIX-XV were made of these varieties of stone.

³ Herzfeld, *AMI*, Vol. V, Part 2; cf. also *TG*, 119.

⁴ Schmidt found no seal impressions whatever in Stratum I of Tepe Hissar, in Iran, and therefore concluded that the seal-shaped objects (buttons) of that period were used exclusively as ornaments; *TH*, 54.

were found.⁵ Of these, three came from Stratum XIX (Fig. 1 and Plate LXXXVIIIa, No. 6; the third is not illustrated). A single button was produced by Stratum XV (Fig. 3), while another, which had long continued in use, was discovered in Stratum XIII (Fig. 2). No buttons were found in the small excavated portion of Stratum XX, or in the soundings at the base of the mound in still earlier deposits.⁶ On the other hand, no seals—as distinguished from buttons—were found in Strata XIX or XX, or in the two soundings, but that seals were known in Halaf times is proved by the discovery in Area A, under unambiguous stratigraphic circumstances,⁷ of a spherical clay pellet bearing the impression of a tiny rectangular seal containing an animal design (Fig. 123). Two additional impressions, one each from Area A (Fig. 11) and the Northeast Base (Fig. 141), furnish additional proof; these were made, furthermore, on lumps of clay which bore rope marks, thus indicating that they had been attached as a mark of ownership to some article of property.

The presence of the stamp seal in the Halaf period is thus convincingly established. Of equal importance are the rope marks which prove that even in this early period the stamp seal functioned as a symbol of ownership, rather than as a mere decorative bead or amulet. Two of the three impressions from Halaf deposits at the foot of the mound bear animal designs; the remaining one (Fig. 11) is incomplete, but enough is preserved to show that the design is geometric. The square shape of this impression suggests that it may have been made, like Fig. 123, by a seal of gable or pyramidal shape, or by a plaque such as Figs. 80 or 148.⁸ Nevertheless, it should be noted that it might

equally well have been made by a pendant similar to Plate CLXXII, Fig. 18, from the same level of Area A, especially since the design of the impression is geometric. Moreover, the impression shown in Fig. 11 comes from Level D of Area A, and is therefore the earliest glyptic specimen yielded by Gawra.

Since the buttons with back-loops in the early stages of their development always bear linear patterns, and since the impression shown in Fig. 123 is much too small to have been made by a button, even when its rectangular outlines and naturalistic design are disregarded, certain conclusions may be drawn from this specimen and from the specimen shown in Fig. 11. The first is that the stamp seal was probably evolved in Northern Mesopotamia or in the highlands to the north or northeast in an early phase of the Halaf period, not from back-looped buttons,⁹ which have been found at Gawra only in early Obeid times (viz., Strata XIX-XV), but more probably from typical Halaf (and pre-Halaf?) pendants of the tanged type¹⁰ (cf. Chapter VII, pp. 194-95, and Plates CLXXII-CLXXIII, Figs. 17-40). Second, back-looped buttons thus become one of the distinguishing elements of an early phase of the Obeid culture at Gawra and, with the majority of the monochrome-painted designs found on pottery, indicate the Elamite source of that culture. Stamp seals, however, together with tanged pendants, a few painted designs on pottery, and the Halafian tholoi of Stratum XVII, represent some of the elements surviving from the Halaf culture into its eclectic successor.

In shape, most of the seals (other than the buttons just described) produced by Gawra are hemispherical or nearly so, all other forms being represented by comparatively few examples. Hemispherical, or as they may better be termed, hemispheroidal seals (Figs. 7, 12, 13, 14, 22-24, *et*

⁵ The button shown on Plate CLXXI, Fig. 6 is of a different type and is not included in the above discussion. At Arpachiyah the back-looped buttons were more common; cf. *Ar.*, Fig. 50, Nos. 14 and 15, and Plate VII, first and second rows.

⁶ They are also unknown at Samarra; cf. *JMI.*, Vol. V, Part 2, p. 86.

⁷ Cf. p. 620 and *BASOR.*, 65, p. 3.

⁸ In this connection it is interesting to note that five of the twenty different seal impressions from the Stratum XIII Well were made by square or rectangular seals. This proportion is substantially higher than that of all seals from all levels and deposits at Gawra, and may suggest

that even at the time of Stratum XIII seals having a shape that would yield a square or rectangular imprint (e.g., pyramids, gables, and plaques) were more numerous than in later strata.

⁹ The sequence of buttons to button-seals does, however, hold good for Iran, where button-seals are still in use at a comparatively late period. Cf., for example, *TH.*, Plates XV, XXVIII, XLIX, and Fig. 118.

¹⁰ Cf. *Ar.*, p. 91, top.

seq.), are unknown before Stratum XII, except for a single example from Stratum XVII. The gable shape is illustrated by sixteen specimens, of which one came from Stratum XVII, and two from Stratum XIII. The best gables are to be seen in Figs. 4, 8, 9, 75, 95, and 119. Seals with a lentoid (double-convex) cross-section are relatively scarce in all levels, but seem to be an early type, since they are represented in Stratum XVIII by Fig. 103, and in Stratum XV by Fig. 104. Other lentoid seals are illustrated in Figs. 10, 31, 49, and 96. Pyramidal and conoidal seals are rare at all times; both types first occur in Stratum XIII. Figs. 5 and 25 show pyramidal seals; conoidal specimens are represented in Figs. 15, 37, and 73. Even more unusual are the stalk (Fig. 6) and spool (Fig. 42) shapes; a total of only three specimens was found of both forms. Small rectangular plaques number four, excluding those from tombs (cf. Plate CVI, Figs. 35 and 36). One was discovered in each of Strata XII, XI-A, and X-A, and the fourth came from unstratified débris. These plaques usually have flat surfaces as in Figs. 80 and 148.

The backs of seals sometimes have either two or four circular holes bored into the seal to hold an inlay (Figs. 109 and 112). These inlays were made of marble, shell, or paste, and are usually white in color to contrast with the stone. Another specimen (Fig. 111) has a grooved back, presumably for the same purpose. These seals with bored or grooved backs were never common, and the extant specimens total but five, all of which are from Strata XIII through XI.

It has previously been observed that while seals were usually made of stone, a few specimens of bone, paste, and terra cotta were also found. Bone seals are shown in Figs. 8, 106, and 160; paste examples are to be seen in Figs. 27, 32, 41, 44, 45, 52, 57, 60, 68, and 73. Figs. 15, 37, and 72 illustrate terra cotta specimens. The varieties of stone employed by the Gawra seal-cutters include: agate (Fig. 4); carnelian (Fig. 140); diorite (Fig. 84); haematite (Fig. 36); lapis lazuli (Fig. 167); limestone (Figs. 5, 6, 12, 14, 33); marble (Figs. 3, 31, 96, 104, 127, 134, 136); obsidian (Figs. 135, 139, 181); and serpentine (Figs. 2, 9, 25, 42, 46, 95, 111, 113, 132, 148). All these kinds

of stone are, however, relatively unusual, for most seals were made of black steatite (Figs. 1, 7, 13, 22, 23, 26, *et seq.*), which was undoubtedly popular because of its jet-black color as well as for the ease with which it lent itself to shaping, drilling, and graving.

As regards the techniques by which the designs were applied to these seals, all are cut or engraved except for seven which bear drilled designs. Five of these are illustrated here (Figs. 74, 75, 138, 139, 181). This drilling technique is far more common on pendants, particularly those of Halaf times; see Chapter VII.

Up to the time of Stratum XII, linear and geometric glyptic designs are somewhat more popular than naturalistic patterns; with Stratum XII, however, the latter become preponderant and proportionately more numerous with each succeeding level. Representations of the human figure are unknown before Stratum XV, with only one example occurring in that level (Fig. 98), and are most popular in Strata XII and XI-A. Animal patterns form the largest group. Examples of seals and impressions bearing animal figures were found in almost all levels and deposits, and in all periods, but are first found in substantial numbers in Stratum XII, where animal designs occur on no less than fifty specimens. The ibex is the animal most frequently depicted (Figs. 95, 100-109, *et seq.*); of domestic animals, *salukis*, as this ancient breed of greyhound is called by the Arabs today, are the most commonly pictured (Figs. 129, 130, 153), usually with ibex or other quarries of the chase (Figs. 145-148, 156-159, 163, 164, 166, 167, 174). Other animals shown are: a single bear (Fig. 137); bison (Fig. 142); fox (Figs. 148, 154); lions (Figs. 152, 156); mouflon (Figs. 131, 132, 164); sheep (Figs. 144, 149-151); and stags (Figs. 123-128). Representations of fish (Figs. 176, 177); snakes (Figs. 178-180); and scorpions (Figs. 181-184) are few in number and are limited to Stratum XII and those strata immediately succeeding it. Snakes are usually shown in pairs with intertwined bodies forming a kind of primitive caduceus. A single snake occurs on Fig. 87 where two humans are shown in embrace; cf. also Fig. 179. An animal figure, possibly that of a crouching

lion, is to be seen on the bulla pictured on Plate LXXXIX.a; over this animal figure is a snake.

Before passing on to a detailed discussion of the glyptic designs, a few details of the seal impressions may be noted. The clay bearing the impressions is always brown in color, except for a few that were blackened by fire, or by contact with organic materials. Bullas, or shaped balls of clay, are infrequent; the outstanding examples are Figs. 86 (=Plate LXXXIX.c), 123 (=Plate LXXXIX.b), 156, 157, 169, and the specimen shown on Plate LXXXIX.a. Fig. 144 was made on a long pointed piece of clay, while Fig. 175 is an impression found on a lump of clay that, to judge by its shape, was used as a jar stopper. Two or more impressions of the same seal on a single lump of clay are not uncommon. Pieces of clay bearing seal impressions frequently bear the imprint of cord, reeds, or cloth, the mediums by which the impression was attached to an object as an identification of ownership. The clay bearing seal impressions is never baked, but is merely sun-dried.

A. LINEAR AND GEOMETRIC DESIGNS

(PLATES LXXXVIII.a, Nos. 1-4, 6, 9, 11, 12; CLVIII-CLXII, Figs. 1-73)

Crisscrossed Designs (Plates LXXXVIII.a; No. 6; CLVIII, Figs. 1-10). Two main types of crisscrossed designs may be distinguished, of which the earlier is featured by lines crossing at right angles, which are in turn crossed by diagonally intersecting lines, as in Figs. 1-4. This complex design is only found in the early levels of Gawra, and is typical of the buttons best illustrated by Fig. 1, from Stratum XIX. These buttons are featured by small back-loops by which they were attached to clothing, and by their elaborately crisscrossed designs. Another Stratum XIX specimen is shown on Plate LXXXVIII.a, No. 6. This is a fragment of a square or rectangular back-looped button measuring 19mm. in width. A third example of a back-looped button that is not illustrated was yielded by the same stratum.¹¹ Fig. 2 is another button with back-loop, but this specimen was found in Stratum XIII. That this object was not a product of this

level, however, but rather of a much earlier one, is indicated not only by its button shape but also by the broken suspension loop, the edges of which are worn smooth, and by the hole bored through the disc of the button, made in order to suspend the object after the back-loop had been broken. Fig. 3 is a smaller button from Stratum XV. The design and back-loop of this specimen are typical, but its oval shape is less characteristic. From dumped earth on the side of the mound, hence of uncertain stratigraphic origin, although perhaps from Stratum XVI, is the gable-shaped seal, Fig. 4. This is of interest because of its transverse boring, later gables being bored lengthwise. Its design is of the same type as Figs. 1 and 3 described above, although not as elaborate.

The second type of crisscrossed design is simpler, since it lacks the diagonally crisscrossed lines of the earlier type (Figs. 5-10). This pattern is found in all strata from XIII through X-A, but is unusual above Stratum XI-A. Fig. 5, from Stratum XIII, shows a pyramidal seal, the apex of which is missing. This shape is rare at Gawra, only one other example having been found in the overlying Stratum XII (Fig. 25). Fig. 6 is a stalk-shaped seal from Stratum XI, and is the only example of this seal form.

Diagonal patterns of crisscrossed lines are illustrated by Figs. 8-10. This pattern is in itself but a minor variation of that found on the seals described in the preceding paragraph, but the seals bearing this pattern are of interest because of their shapes. Fig. 8, for example, is a fine specimen of the gable shape, and was found in Stratum XII. Even more unusual is its material, which is bone. Fig. 9 is also a gable, but is made of serpentine. The pattern of Fig. 10 is somewhat irregular, with a line in the middle dividing the cross-hatching into two sections.

Quartered-Circle Designs (Plates LXXXVIII.a, Nos. 1, 4, 11; CLVIII-CLX, Figs. 11-33). The most popular geometric pattern found on the seals of Gawra bears two lines that cross in the center of the seal, thus forming a quartered circle. Dozens of examples of this pattern, with numerous variations of the fill-in lines, were found in all levels from XIII through IX. The design is, however, unknown before Stratum XIII (except for Figs. 11 and 15), and even in that

¹¹ This was also rectangular, measuring 31mm. in length and 19mm. in width.

level is represented by only two examples, both of which come from the Well. Most specimens bearing this type of design were found in Strata XII, XI-A, and XI.

The most common form of the quartered-circle pattern is shown in Figs. 12-15; all these are hemispheroidal stone seals, with the exception of Fig. 15, which is one of the few terra cotta seals discovered, and is, moreover, conoidal in shape. In Figs. 16 and 17, both seal impressions, the center lines connect rows of chevrons; the latter, from the White Room of Stratum XII, also bears a superimposed diagonal cross. The tiny, hemispheroidal, black steatite seal shown on Plate LXXXVIII.a, No. 11 (Stratum XI), bears a simple pattern of a center-cross formed by two rows of connected chevrons.

The phrase "quartered-circle" does not accurately describe Figs. 11, 18, and 19 of this second group, which are square in outline. On these, however, as on the circular seals and impressions, we have the same center-crossed lines dividing the design into quarters. The fill-in lines on all these specimens are of the usual kind. Fig. 11, an incomplete impression marked with the imprint of cord with which it was attached to some object, comes from Level D of Area A, and is the earliest glyptic specimen yet discovered at Gawra. The significance of this impression, as well as others from the Halaf deposits of Area A and the Northeast Base, has been discussed on pages 176-77.

A chevron-filled, quartered-circle design is illustrated by Figs. 20 and 21, both of which are from Stratum XI. One other example was found in Stratum XII (unillustrated). A further variation is to be seen in Figs. 22-24, where the pattern is not unlike a cobweb. Figs. 25 and 26 illustrate a pattern in which each quarter of the circle is filled in with parallel lines, the lines of each quarter being in opposition to those of the adjoining quarters. Fig. 27, on the other hand, lacks the lines quartering the circle, although in other respects the pattern is identical with that of the two specimens just described; a pattern that is based on the swastika. All three seals shown in Figs. 25-27 were found in Stratum XII; two additional examples from the same level, and only one other from Stratum XI-A (perhaps carried over from the underlying stratum), may indicate that this variation of the quartered-

circle pattern was a short-lived one, and probably restricted to Stratum XII.

The quartered-circle produced by double lines, outlining the form of a center-cross, such as is shown in Figs. 28-30, and No. 4 of Plate LXXXVIII.a, represents an elaboration of the simpler, single-crossed lines that have characterized most examples discussed so far. Examples of this pattern were found in all levels from XIII through XI, although their total is less than ten. The outlined cross usually contains another composed either of connected chevrons, as in Fig. 29; rows of unconnected chevrons, as in Fig. 28 (=Plate LXXXVIII.a, No. 1); or is merely hatched, as in Fig. 30.

Figs. 31, one of the largest stamp seals found at Gawra, and 32 (the first white paste seal to come to our attention), both of which are from Stratum XI-A, illustrate an intermediate stage between the chevron-filled, quartered-circle design shown in Figs. 20 and 21, and the Maltese-cross design of Fig. 33. The latter seal, also from Stratum XI-A, possesses the same hatching noted above on Fig. 30, but it also bears the only formal representation of the Maltese cross found in the Gawra glyptic material.

Center-Point Designs (Plates LXXXVIII.a, No. 12; CLX, Figs. 34-37). This pattern is consistently composed of a dot or small circle in the center of the seal, from which point radiate short lines. As a design it achieved but a limited popularity, and is represented only by nine examples, occurring in Strata XVI, XIII, XII, XI-A, and IX. The comparatively long span of time covered by these levels is not to be taken as evidence of the importance of the center-point pattern; on the contrary, it is such a rudimentary decorative motif that it could be independently evolved in any level and in any period. Of the illustrated examples only Fig. 34 from Stratum XVI is an impression. The seal shown in Fig. 37 (=Plate LXXXVIII.a, No. 12) is of interest because of its unusual conical shape, and its material, which is terra cotta. The central design of this specimen is somewhat more elaborate than the other members of this group.

Center-Line Designs (Plates LXXXVIII.a, Nos. 2, 9; CLX-CLXI, Figs. 38-50). The first group of patterns included under this heading are characterized by a single center-line that bisects the face of the seal. In Figs. 38-40 this center-line

joins opposed groups of chevrons, a pattern that is restricted to Strata XIII and XII. In Figs. 41 and 42 a more common design is illustrated that is best described as herringbone. This pattern is found in Strata XIII through X, but of more interest than the design is the spool shape of the seal shown in Fig. 42 (from Stratum XI); a shape that is duplicated only by one other seal from Stratum XIII.

Fig. 43, like other impressions from the Stratum XIII Well, has a more complex design than seals or impressions bearing linear and geometric patterns from other levels (cf. Figs. 38, 39, 48, and 70, also from the Well). The seal shown in Plate LXXXVIII.a, No. 9, has the center-line characteristic of all specimens described under this heading, but the diagonally crossed lines here form an aimless pattern. Figs. 44 and 45, both seals made of white paste, show a kind of sprig design. Fig. 46 lacks a center-line and is, therefore, not correctly included in the present category, although it bears a row of chevrons.

The second sub-type of seals and impressions of this group are those bearing two center-lines, such as are shown in Figs. 47 (=Plate LXXXVIII.a, No. 2) and 48. Fig. 49 has the same basic pattern as Fig. 48, although lacking the two connecting lines. Fig. 50 shows a rather unusual treatment of single center-line pattern.

Sprig Designs (Plate CLXI, Figs. 51-53). The specimens illustrated are the only ones found with this rare design. Fig. 51, from Stratum XVII, is apparently an incomplete impression of a larger seal. Fig. 52, from Stratum XIII, is the most elaborate example of the sprig design. Fig. 53 illustrates a poorly conceived pattern showing a branch or sprig.

Triangular Designs (Plate CLXI, Figs. 54-55). This is another unusual pattern, examples of which number but four from Strata XI (3) and X (1). The design consists merely of rows of triangles with points opposed, and is found only on seals yielding a square impression. A somewhat similar design is to be noted on a seal from Tomb G36-134, attributed to Stratum XI (Plate CVI, Fig. 35).

Chevron-Center Designs (Plate CLXI, Figs. 56-58). All examples of this design, which total only four, come from Strata XII, XI-A, and XI. The pattern of Fig. 57 is entirely composed of chevrons which fill in the whole area of the seal,

and surround a large center chevron. Of white paste, this seal was found in Stratum XII. From the dump, although probably excavated in Stratum XII, is Fig. 58. The design of this example seems to portray leaves and a flower, but is best described as geometric. The only example of the chevron-center pattern found later than Stratum XII is illustrated in Fig. 56, and was discovered in Stratum XI. It is apparently a debased form of Figs. 57 and 58.

Designs of Segmented Circles (Plates LXXXVIII.a, No. 3; CLXI, Figs. 59-64). The design found on all members of this group is composed of a center triangle (Figs. 59 and 60=Plate LXXXVIII.a, No. 3), or of a center square (Figs. 62-64) formed by inverted quadrantal arcs. Of the twelve extant examples of the pattern featuring four arcs and a center square, ten came from Strata XIII and XII, and one each from Strata XI-A and XI. On the other hand, the variant pattern of a center triangle with incurving sides formed by three arcs is known only from Strata XI-A and XI; four of the five examples having been found in Stratum XI. The three-arc type with center triangle is therefore the later one, but both forms are unknown after Stratum XI.

The center square of each member of the earlier variety is filled in either with a crossed herringbone, as in Fig. 64; a simple cross (Fig. 63); an oval (Fig. 62); or with parallel cross-lines as in Fig. 61. This detail is lacking in the triangular-center designs.

Quatrefoil Designs (Plates CLXI-CLXII, Figs. 65-69). Strata XIII, XII, and XI-A yielded all seven examples of this design, which is most popular in Stratum XII. The quatrefoil design is merely outlined on Figs. 65 and 66; the latter is a badly worn seal. The repeated outlining of the center of Figs. 67 and 68 make them the most attractive of the group. Fig. 69, from Stratum XIII, is without parallel in the rest of the glyptic material.

Miscellaneous Designs (Plates CLXII, Figs. 70-73). The seals and seal impressions grouped here bear designs that cannot be classified under any of the foregoing headings, and comprise the remaining examples of linear and geometric designs. Fig. 70 is typical of other impressions from the same source (the Stratum XIII Well) in its complicated, hatched pattern. Fig. 71 shows the design of a seal

of which multiple impressions were found on three lumps of clay, all from Stratum XII, and just below the Round House of the overlying stratum. A seal of terra cotta is shown in Fig. 72; the design is meaningless. The seal illustrated by Fig. 73 is made of white paste and was found in Stratum XI-A. The pattern or object represented on this seal does not resemble that on any other from Gawra, but has an appearance not altogether unlike later representations of Sumerian Reed Huts.¹²

B. DRILLED DESIGNS

(PLATE CLXII, FIGS. 74 AND 75)

This technique, unusual on seals in the periods covered by this volume, but common on pendants (see Chapter VII), is illustrated by only seven specimens from three levels: XII, XI, and IX; also by one from a grave in Stratum XVIII. Of these, four have drilled holes that are not arranged in a pattern, but simply fill the surface of the seal as in Figs. 74 and 75. The seal, Fig. 140, found in a Stratum XVIII grave, shows a quadruped with connected drill holes forming the animal's body. Two other specimens (Figs. 138 and 139) also bearing animal figures, have incidental drill holes; the remaining example of the drilled technique may be seen in Fig. 181, where a stylized scorpion is represented, on one side of which are three drilled holes.

C. NATURALISTIC DESIGNS—HUMAN FIGURES

(PLATES LXXXVIII.a, Nos. 5, 7, 10; LXXXIX.c, d; CLXII-CLXIV, FIGS. 76-102)

Seals and seal impressions bearing human figures total forty-five, of which number thirty-five were yielded by Strata XIII, XII, and XI-A. Representations of the human figure on seals are unknown in the levels antedating XIII, although found in the earliest phase (viz., in the Well) of the latter level.¹³

Glyptic designs containing human figures may be classified into three broad groups: (1) single human figures; (2) two or more humans; (3) humans and animals. Examples of the latter group are the most numerous, but seals and impressions

bearing single human figures comprise only a slightly smaller classification. Designs showing two or more human figures, a group that includes a small number of erotic scenes, are relatively few in number.

Designs with a Single Human Figure (Plates LXXXVIII.a, Nos. 7 and 10; LXXXIX.d; CLXII-CLXIII, FIGS. 76-85). The human figure is often represented with an inverted triangle for the torso (Figs. 76-78). This artistic convention, however, seems to have been limited to Stratum XII, for all specimens on which the human body is so depicted come from that stratum, with the exception of Fig. 77, which was discovered in Stratum XI-A. On all these, the heads of the men (there are no details which would indicate the female sex) are represented with simple, oblique strokes, and the figures may therefore be described as bird-headed; see also Figs. 80, 81, 84, 86, 87, 90, 92, 94, 96, 100-102. Possibly such representations of human heads are to be taken as an indication that bearded men were intended; compare especially Fig. 86, where the head of the left-hand figure is essentially an oblique stroke, but in which the detail is more fully worked out, and a beard definitely shown.

To return to the three triangular-bodied examples (Figs. 76-78), the men shown in Figs. 76 and 77 (=Plate LXXXVIII.a, Nos. 7 and 10) seem to be carrying or holding objects, which in the case of the latter may be a sack. An unillustrated black steatite hemispheroidal seal with two deep holes for inlay on its back was found in Stratum XII, which bore a design identical with Fig. 77. The human figure on that seal also appears to be carrying an object which may be a sack, although precise identification is again impossible due to wear of the surfaces. If a sack was intended, the seal may then depict a sowing scene. The head of the human in Fig. 78 appears to have double plumes, braids, or horns¹⁴ (see also Fig. 95). The V-shaped mark to the left of the figure may be a mere fill-in, but the object to the right of the figure, towards which he is advancing is perhaps a fox or donkey's head, with the ears clearly shown, but with the rest

¹² Cf. *US.*, Plate 17, Nos. 334, 335, and Plate 27, No. 484.

¹³ Only one painted human figure on pottery vessels from levels under Stratum XII has been found; see Plate LXXV.a, and b, also p. 135.

¹⁴ *AMI.*, Vol. V, Part 2, p. 103 and No. 2373. Also compare the reptilian-headed female figurines from Ur (Woolley, *Antiquaries Journal*, Vol. X, Plate XLVIII); and the painted figures on pottery from Susa (Pottier, *Mémoires de la Délégation en Perse*, XIII, Fig. 129).

of the head obliterated. Compare the similar head in the same position on Fig. 86.

Fig. 79, from Stratum XI-A, an impression bearing the imprint of reeds on its back, shows a bird-headed man with arms upraised, recalling the similar posture of the men painted on the Stratum X beaker; see Plate CXLV, Fig. 398. A small rectangular plaque is shown in Fig. 80, which was found in Stratum XI-A. One surface of this object bears a geometric decoration (compare Figs. 20 and 21); the other shows a man with one arm upraised. The incomplete impression from Stratum XI, Fig. 81, has a bird-headed man (with plumes, horns, or braids?) with a triangular torso, but the interest of this example attaches to the fact that the man is depicted holding what may be a club in his right hand. Another unusual detail is the belt or sash shown at his middle, the ends hanging away from the body (cf. the painted human figure shown in Plate LXXV.a and b).

Figs. 82-85 are the most important of the present group. The first of these (=Plate LXXXIX.d) is from Stratum XI-A; in the center of this impression is a square object with three vertical, triangular projections on top, which may be a horned altar. The body of the altar has a ribbed or fluted panel. To the right of the altar is a bent human figure, with one arm reaching behind his head, where he seems to be holding an object of some kind, perhaps a vessel. To the left of the altar is a large triangle. The upper part, which may comprise half of this circular impression, is unfortunately missing, but above the triangle is a disc, and part of a triangular projection which, like the base of the altar, seems to be ribbed or fluted. The scene may represent a temple worshiper approaching the altar with an offering.

Stratum XII yielded an incomplete seal impression, Fig. 83, which contains all the elements noted in the previous specimen. The parallelism of the designs of these seal impression fragments, both of which must have been made by unusually large seals, is remarkably close and not without interest and importance. Thus, the same triple-horned altar, triangle, and disc may be noted; in addition we again have a human figure, holding an animal's hind leg (?). The complete scene may, as in Fig. 82, show a temple worshiper bearing an offering. The

only element in the present impression which is lacking in Fig. 82 is the arrow-shaped object at the left of the impression (see the similar object on Fig. 133).

The association of triangle, disc, and altar with three horns on both impressions must indicate the sacred character of all three, but the precise significance of the triangle and disc cannot be stated from the evidence now at hand.

An altar may again be in evidence in Fig. 84, a seal from Stratum XI-A. A bird-headed human kneels before the altar in this example, while overhead is a star, and in back of the worshiper is a tree. The human figure has broad shoulders and a narrow waist, but lacks the triangular body of Figs. 76-78.

Fig. 85 is an impression from Stratum XI-A that is obscure for the most part. A human figure in the center is discernible, and a rectangular object to the right may be another altar, lacking the horns of those in Figs. 82 and 83, but with horizontal lines that may signify paneling as in Fig. 82, or even courses of bricks. The remaining lines filling out the design are unrecognizable.

Designs with Two or More Human Figures (Plates LXXXIX.c; CLXIII-CLXIV, Figs. 86-93). Erotic scenes form the main group under this heading, and are illustrated by Figs. 86-88. All these are impressions, and all come from Strata XI-A and XI. The clearest and best preserved example is shown in Fig. 86 (=Plate LXXXIX.c), which was made on a ball of clay, pressed into hemispherical shape by the imprint of the seal. In this scene an ithyphallic, bearded male at the left is holding, at the hips, another person with spread arms, and with back turned and bent. Behind the ithyphallic male is a long-eared animal's head, perhaps that of a fox or donkey, while an object in front of the second human figure may be another animal's head seen in profile. A similar seal impression was discovered in Stratum VIII.¹⁵

Figs. 87 and 88 exemplify a second type of erotic scene. On the former are two bird-headed humans, embracing face to face, and seated on a footed couch or stool. Each human figure has one arm

¹⁵ TG., Plate LV.b, and Plate LVIII, Fig. 41. AMI., Vol. V, Part 2, Fig. 14 (Tepe Giyan 2362) shows a similar scene.

akimbo. A snake occupies the space at the right edge of the impression; the remaining marks are probably mere fill-ins. Fig. 88, from Stratum XI, bears the representations of two human figures in the same attitude as Fig. 87. In the present impression, however, at least one of the humans has an arm upraised.¹⁶

The remaining specimens bear the figures of two or more humans in scenes other than erotic. Fig. 89 is the upper part of a square or rectangular seal impression from Stratum XI-A. Two human figures advance right, but the interest of this impression lies in the bident held by the man at the left. Metal bidents were used in Iran in prehistoric times, but have not yet been found in Mesopotamia except for a single later example discovered at Ur.¹⁷ Between the heads of the two humans is an object that may be an animal's head (mouflon?); the remaining markings are fill-ins or obscure symbols.

Fig. 90, a circular impression from Stratum XII, furnishes another instance of bird-headed men with arms upraised; above each figure is a star. Fig. 91 is unique in its subject matter, which shows two men with poles stirring the contents of a large jar. Like the preceding specimen, this is an impression from Stratum XII, although suggestive of later seals.

Three bird-headed men, facing and advancing right with joined hands, appear on the incomplete, square impression, Fig. 92, from the Stratum XIII Well. Dancers would seem to be represented,¹⁸ but whatever interpretation is given, the scene is unduplicated by any other seals or impressions from Gawra, and is apparently without a glyptic parallel elsewhere.¹⁹

Fig. 93 has no less than four human figures

¹⁶ *US.*, Plate 18, Nos. 365 and 366 illustrate southern parallels to this scene which, however, occur on cylinder seals dating to the Jemdet Nasr period.

¹⁷ *MJ.*, Vol. XXIII, No. 4 (1933), Plate CXX, A, Nos. H775 and H1661; Plate CLII, top left; Plate CLIII, A, and p. 400. The Ur example is shown in *UC.*, Plate 230, No. U15313.

¹⁸ The Arabs of modern Iraq dance in such a manner, with long lines of men joining hands.

¹⁹ "Dancers" with joined "hands" appear as a painted design on earlier pottery from Samarra, Tell Halaf, Arpachiyah, Chagar Bazar, and Nineveh. These painted figures are, however, severely geometric. A closer parallel, both stylistically and chronologically (although again in painted design), comes from Tepe Sialk in western Iran

advancing in a procession to the right; possibly another human was shown in that portion of the impression now missing. Each of the men appears to be carrying a sack on his back, but the clay has not furnished an impression clear enough for positive identification. Underneath the procession are two discs, and what may be the tips of two triangles as well as part of a rectangular object. Discs, triangles, and square altars, all closely associated, have been encountered on other impressions; cf. Figs. 82 and 83. The evidence of the latter impressions would therefore suggest that the missing part of Fig. 93 contained these sacred symbols, and that the procession of men on the present specimen represents either captives with their hands bound behind their backs, or worshippers carrying offerings or sacrifices to a temple or shrine. The present object, like Fig. 82, was found in Stratum XI-A, close to the Temple of that level.

Designs with Humans and Animals (Plates LXXXVIIIa, No. 5; CLXIV, Figs. 94-102). The human figure of Fig. 94, an impression from the Stratum XIII Well, has the now familiar bird-shaped head and triangular body; his arms are upraised in the usual attitude, but ithyphallism may be indicated. Behind this human figure is a horned (?) animal in a kneeling position, with head thrown back. Two lumps of clay were found in the Stratum XIII Well bearing similar impressions. Essentially the same scene is recorded in Fig. 95 (=Plate LXXXVIIIa, No. 5), where the composition is better balanced, and the figures possess more vigor. This deeply engraved and well-preserved seal, which was discovered in Stratum XIII, shows an animal (now clearly horned and probably an ibex) in a prancing attitude, and following a man with the double plumes, horns, or braids noted in Fig. 78. Two stars, one underneath the animal and the other below the human figure, are another feature of the present seal not found on Fig. 94.

The design of Fig. 96, from Stratum X, contains the same main elements, but lacks the quality of Fig. 95. In the present instance, the positions of animal and human are reversed, the animal having his head turned back to the human figure. The

(Ghirshman, *Fouilles de Sialk*, Plate LXXX, D10). Cf. also Schmidt, *MJ.*, Vol. XXIII, No. 4, Plate LXXXVII, H1126 and Plate LXXXVIII, Hd23 and Ha78.

head of the man is shown by a long stroke; his arms are upraised, while behind him is a crude star. The rectangular seal impression from Stratum XI-A, Fig. 97, has a human figure lacking the oblique stroke to indicate the head which has been found on previous examples, although it possesses a triangular body. The human figure is placed above a horned animal figure, and back to back to it in what is an unusual juxtaposition.

The remaining examples, all seal impressions, contain single human figures with those of two or more animals. Fig. 98, found just below Stratum XV, is one of the few impressions from levels antedating XIII, and shows two addorsed horned animals. On the left side is a crudely drawn human in a sitting position, with one arm stiffly extended. Fig. 99, an impression fragment from Stratum XII, was made by a square seal. It bears a bearded (?) human, right, followed by two salukis, one above the other. The man has both arms upraised; one hand touches the head of the topmost dog (see Figs. 141-150 for other specimens having superposed animals).

Three impressions (Figs. 100-102), all from Stratum XIII, complete the catalogue of seals and impressions bearing representations of human beings. All of these illustrate a full style of glyptic art not encountered previously (compare, however, Figs. 162-167). This style consists of filling the entire area of the seal with figures of animals, which in the present three examples surround the human figure. The animal figures are so placed and arranged that the design is rotary. The heads of the human figures are all represented with horizontal strokes, rather than the oblique encountered heretofore. The arms of the humans in Figs. 101 and 102 are upraised, but in Fig. 100 the man holds his arms at his sides. The animals represented are ibexes; both Figs. 100 and 102, however, contain in addition a single mouflon.

D. NATURALISTIC DESIGNS—ANIMAL FIGURES (PLATES LXXXVIII.C, LXXXIX.b; CLXIV-CLXX, FIGS. 103-175)

The most common figures represented in the Gawra glyptic material are those of animals, about three hundred seals and impressions bearing animal

figures having been discovered in all levels and deposits. The animals depicted are rarely of any domesticated variety, except for the commonly represented saluki. Most usually gazelles, stags, ibexes, and mouflons are the animals depicted.

The seals and impressions collected under this heading have been classified into eight groups, of which six are based on the number of animals shown, or on the number of registers contained in the seal. The remaining two groups include designs of animal heads only, and designs showing both birds and animals. Those comparatively rare seals and seal impressions which show fishes, snakes, and scorpions will be described in Section E of this chapter.

Designs with Single Animal Figures (Plates LXXXIX.b; CLXIV-CLXVII, Figs. 103-140). Glyptic designs composed of only one animal figure, with or without fill-ins, comprise the largest category of seals and seal impressions. The animal most commonly represented is the ibex, easily distinguished by its long, curving horns, whose length is often exaggerated by the ancient seal-cutter. The even more distinctive characteristic of the ibex—the beard—is quite often omitted. The earliest seal showing an ibex may be seen in Fig. 103; this, like Fig. 140, was found in Stratum XVIII. Fig. 104, from Stratum XV, likewise has a lentoid section. The animal on Fig. 105 (Stratum XIII), is in a style of which Gawra has yielded no further examples; the chevron decoration of the field is another feature unduplicated on any other seals with naturalistic designs, although patterns formed by inverted arcs have already been described (cf. Figs. 59-64). A somewhat analogous design is illustrated by Fig. 106, a lentoid seal from Stratum XI. Made of bone and crudely engraved, this specimen lacks the fine detail of Fig. 105. Fig. 107 was found in Stratum XII and shows two impressions from the same seal. It is one of the few specimens on which the beard of the ibex is represented, although the scratches under the head of the (staling?) ibex in Fig. 109 may indicate the same feature. Of more interest, however, are the four drilled holes on the back of the seal, which contained a nacre inlay set in bitumen. Also from Stratum XII is Fig. 111, which instead of the more usual inlay holes has four deeply cut, parallel lines across the back of the seal, presumably to accommodate a paste or pigment

inlay. The ibex on this seal apparently shows the animal in a kneeling position. This attitude is duplicated by the ibex of Figs. 110 and 116, and by the stags of Figs. 124 and 125. A pair of inlay holes feature Fig. 112 from Stratum XI, bearing the worn, but still graceful figure of an ibex. From Stratum XI-A come Figs. 113 and 115. In the field of the former, over the animal's back, are fill-ins of connected chevrons similar to those found in Figs. 126 and 128. The animal figure on Fig. 115 is worn, but was probably undistinguished engraving even when new. Fig. 114 shows the imprint of a tiny circular seal, of which thirteen impressions were found on a single lump of clay in Stratum XI-A. Fig. 116, an impression from Stratum X, has a kneeling ibex (cf. Figs. 110 and 111). The length of the horns of this animal has been exaggerated, their tips almost touching the animal's back. Two specimens from Stratum IX are illustrated in Figs. 117 and 118. The latter was discovered next to the walls of the Stratum IX Temple, and exemplifies the artistic decline apparent in most of the glyptic specimens recovered from the three strata overlying XI. On the other hand, Fig. 119 bears a delicately cut and graceful ibex figure; this may have come from Stratum XII or XI-A, but was found in dumped earth.

Three impressions, Figs. 120-122, form a subgroup of the glyptic representations of ibexes. These are characterized by full animal figures associated with ibex heads which occur in each of the present instances over the back of the animal (see also Figs. 132, 166, 167). The design of Fig. 121 is particularly well cut; unfortunately, this impression was found in dumped earth on the side of the mound, so that its exact stratigraphic source is doubtful, although it may have originated in Stratum XIII. The ibex and head of Fig. 120 (Stratum XI) are less realistically portrayed, while the head over the animal's back in Fig. 122 (Stratum XII) is scarcely recognizable as such.

Stags are shown on Figs. 123-128. The first of these is one of the earliest seal impressions produced by Gawra or any other site, since it, like Fig. 11, was found in the Halaf deposits of Area A, covered by the fragments of two rosette-center bowls, and a jar (Plates CX, Fig. 11; CXI, Fig. 16; CXVI,

Fig. 56). These pottery fragments formed a covering which not only served to protect the object, but also prevented any doubts as to its source in Halaf deposits that might have been entertained had the impression been discovered in a less unequivocal situation. This impression, which was made on a small ball of clay, about 31mm. in diameter (Plate LXXXIX.b), was produced by a seal having rectangular base; a fact which suggests the seal was of a gabled or pyramidal shape, or was possibly a plaque. The impression is tiny, measuring but 7 x 9mm. (Fig. 123 shows it more than double its actual size); the seal would therefore have been the smallest of any recovered from the debris of Gawra. On this impression an animal is represented which may be a gazelle, but because of the recurved horns a stag seems more probable. The animal stands with lowered head, an attitude that permits the full utilization of the rectangular area of the seal, and obviates any blank space over the back of the animal. The craftsmanship evident in this tiny imprint is of the highest quality, and is comparable only to that exhibited in the superb products of the contemporary Halafian potters and painters. The attitude of the engraved figure is lifelike, and although the lower line of the body seems to have been less carefully done than the rest, the head is particularly well rendered, and the whole ranks as one of the best and most delicate products of the Gawra seal-cutters of any period.

Figs. 124-127 show stags with multi-tined antlers; of these, Figs. 124 and 125 depict the animals with bent forelegs; compare Figs. 110 and 116. Fig. 125, from Stratum X, furnishes another example of the decadence into which the art of seal-cutting had fallen after the period represented by Stratum XI. The connected chevrons over the back of the animal on Fig. 126 (Stratum XII) are undoubtedly its antlers (cf. Fig. 127), although the head of the animal is missing. On the other hand, the field of the seal is filled in with two similar rows of connected chevrons, a symbol which in this case may be stylized trees. An identical symbol is to be found on the incomplete impression, Fig. 128, where the short-horned animal shown may be a gazelle.

The only seal or impression discovered at Gawra

which bears the figure of a saluki unaccompanied by the figures of other beasts or by humans may be seen in Fig. 129, from Stratum XI-A. Representations of salukis occur rarely with figures of men (Fig. 99), but are commonly combined with other animals (Figs. 145-148, 158, 159, 163, 164, 166, 167). The mark under the forelegs of this ancient greyhound may, however, represent the head of an ibex; cf. the similar heads of Figs. 120-122, 166, 167, 171, and 172.

Fig. 130, a fragment of a seal impression from Stratum XII or XII-A, although bearing the figure of a single saluki, is but part of a larger impression in which, presumably, figures of other animals were shown. It does not, therefore, in a strict sense belong in the present group. The seal producing this impression must have been extremely well cut, for the dog's figure, as shown even on our bit of clay, is well proportioned and remarkably lifelike.

Mouflons, a rather uncommon element in Gawra glyptic design, are to be seen in Figs. 131 and 132; compare also Figs. 164, 168, 169, and 170. The double curve of the horns of the animal on Fig. 131 may perhaps indicate that another kind of animal was intended, but in all likelihood they are merely a more fanciful reproduction of those of a mouflon. Likewise, the horns of the animal in Fig. 132 are exaggerated in length, although their forward curve cannot be connected with any other species. The horned head over the animal in that example is a more typical representation of mouflon horns.

Fig. 133, from the Stratum XIII Well, shows a horned animal, perhaps an ibex or gazelle. Of greater interest, however, is the arrow-shaped object at the left, duplicated only in Fig. 83, an impression from Stratum XII, which also contained a horned altar, triangle, disc, and human figure. Whether the present impression is to be connected with the group of altar scenes (Figs. 82-85) because of this sign alone is problematical, and the impression is too incomplete to give further clues. However, the presence of the horned animal would seem to contradict such an assumption, although it should be noted that in front of the animal is a point which may have been the apex of a triangle.

Fig. 134, found near the temple area of Stratum

XIII, has a figure which may be interpreted as an extremely stylized animal, but probably has a more obscure symbolism, since stylization to this extent is otherwise unknown in the glyptic material from Stratum XIII, or any other level. The seal shown in Fig. 135 came from Stratum XI and is made of obsidian. The animal shown is not readily identifiable, although the long tail would seem to indicate that a dog of some kind was intended. If this is indeed a dog, the long line over the animal's back, and encircling its neck, may be a leash. The poorly engraved horned animal in Fig. 136 from Stratum X is of interest chiefly because it, like Figs. 118, 125, and others, illustrates the lower artistic plane represented by the seals and impressions from Strata X-A and IX, as compared to that of the underlying levels. Also from Stratum X is Fig. 137, which furnishes the only representation of a bear yet discovered at Gawra. The ursine character of this beast is confirmed by all of its details even though the head is missing; thus the shape and position of the legs, the short tail, and the cross-hatching of the body to indicate the fur are all characteristic.

The remaining three seals and impressions, Figs. 138-140, round out the group of designs composed of single animal figures. All bear drilled holes, which in the case of Figs. 138 and 139 (both from Stratum XII) are merely decorative fill-ins, but in Fig. 140 are connected to form the body of the crudely cut animal on that seal. The latter was discovered in a double burial, Locus 7-66, in Stratum XVIII (Plate LXIII.a). Other seals and impressions decorated in the drilled technique have been described in Section B of this chapter, p. 182; cf. Figs. 74, 75, 181 and the drilled pendants discussed in Chapter VII.

Designs with Two Animal Figures, Superposed (Plates CLXVII-CLXVIII, Figs. 141-151). Examples of two animals, one superposed over the other, are known only from Stratum XII and those levels overlying it, except for one impression (Fig. 141) from the Northeast Base. The most interesting specimens in this group are Figs. 142 and 143, in which bison are shown; they are the only representations of these animals yet found at Gawra. Fig. 142 is from Stratum XI-A, and was produced by a finely engraved seal, with all details of the animal's

profile carefully worked out. Fig. 143, from the same stratum, apparently shows two kneeling bison, although precise identification of the animals on this specimen is hazardous since the workmanship is stereotyped and superficial.

In Fig. 144 we are again introduced to a kind of animal not previously encountered; this impression, on a long, pointed piece of clay, contains the figures of two sheep. That sheep and not dogs (the only other possibility) were intended is proved by the heavy bodies and pointed heads; furthermore, the long, hanging tails of the animals seem to reproduce this characteristic of the fat-tailed species of sheep found in Mesopotamia today (cf. also Figs. 149-151).

Figs. 145-147 show the familiar ibexes and salukis, their association symbolizing the chase. Fig. 148 is a rectangular plaque from Stratum X; the animals face left, and although the top one is definitely a saluki, the lower figure may be that of a fox.

Sheep, which have heretofore been met only in Fig. 144, are represented on Figs. 149-151. This group of impressions is, furthermore, characterized by a smaller animal superposed over the larger, and more particularly by an inverted U-shaped mark, occurring in all examples under the head of the main animal figure. This sign perhaps symbolizes a manger or stall, although no positive identification can be made from our evidence alone; nevertheless it is certain that a yoke cannot have been intended, for sheep rather than draught animals are definitely represented. Three impressions showing superposed sheep, together with this curious mark, were found in Stratum X; one was yielded by Stratum IX, while still another was discovered in dumped earth, which may have come from Stratum X. All five impressions were made by different seals, and it is therefore interesting to find that this particular glyptic scene is restricted to Strata IX and X.²⁰

Designs with Two Crossed Animal Figures. Only one seal impression, from the hundreds recovered at Gawra in the levels and deposits covered by this account, shows animals with their bodies crossed: Fig. 152. This style seems, however, to have been a later development in glyptic art, and

at Gawra is known on stamp seals from Stratum VIII and, of course, on still later cylinder seals.²¹ The occurrence of this design on the present specimen is of some importance, since this impression was discovered in Stratum XI and is therefore its earliest example. Two further details of this impression are of interest. First, it should be noted that the animals are lions, the first representation of these animals to come to our attention (cf. also Fig. 156 and Plate LXXXIX.a), while what may be an ibex head occupies the left-hand side of the seal. The other detail is the manner in which the ancient artist, faced with the problem of showing crossed animals, eliminated the possibility of crowding and confusion of line by twisting the bodies of his subjects in order to have two legs occupy each quarter of the circle formed by the outline of the seal.

Designs with Two Opposed Animal Figures (Plate CLXVIII, Fig. 153). All examples of this reversible style, where the animals are shown addorsed, head to tail, come from Stratum XI-A and XI and number but three, of which one is illustrated in Fig. 153, where both animals are salukis. In addition, Fig. 98 shows two addorsed animals with a human figure on an impression found below Stratum XV.

Under this heading may be mentioned two examples (one each from Strata XII and XI-A) of a pattern where the animals have their feet opposed. Both were fragmentary impressions showing ibexes, but are too incomplete to illustrate.

Animal Designs in a Single Register (Plate CLXVIII, Figs. 154 and 155). This represents another unusual glyptic style, for only two impressions (both from Stratum XI-A) illustrating it were found: Figs. 154 and 155. The former, from Room M of the Round House, shows a saluki facing right; in front of him is a smaller animal, probably a fox, with head turned back. Fig. 155 is an impression made by a large rectangular seal, possibly

²⁰ See Mallowan, *AAA.*, Vol. XX, Nos. 1-3, Plate LXIV, No. 20 for a possible parallel from Nineveh (Strata 2-3).

²¹ *TG.*, Plate LVIII, Figs. 31-33 where, however, the animals have their necks, rather than their bodies, crossed. Gawra cylinder seals showing animals with crossed bodies are illustrated *ibid.*, Plate LIX, Fig. 43 (Stratum VIII); Fig. 5 (Stratum VI); and Plate LXI, Fig. 68 (Stratum V).

a gable or plaque.²² Aside from its extraordinary size, this impression is remarkable for its procession of three ibexes, facing right; the foremost animal holds up a foreleg.

Animal Designs in Two Registers (Plates CLXVIII-CLXIX, Figs. 156-159). The incomplete impression, Fig. 156 from Stratum XI-A, is made on a ball of clay, pressed into a hemispherical shape by the imprint of the seal. Three different animals are shown; in the lower register are a saluki and an ibex, right, with head turned back. Above the saluki is a lion in a crouching position, and we may presume that in the missing portion of the impression was another animal. Fig. 157 was also made on a clay bulla. This is the imprint of a rectangular seal having two registers, each composed of an ibex followed by a saluki. The saluki in the top row, however, has another smaller animal figure superposed upon it. The remaining specimens are from Stratum XI. Fig. 158 shows the commonly associated figures of ibexes and salukis. In Fig. 159 salukis are again present, this time in pursuit of two long-necked unidentifiable animals, who have their heads turned back.

Animal Designs in Three Registers (Plate CLXIX, Figs. 160 and 161). Glyptic designs composed of three rows of animal figures number only five, all of which were yielded by Strata XI-A through X. A gable-shaped bone seal is illustrated in Fig. 160. This bears the figure of a stag, with head turned back; above the stag is another animal, perhaps a saluki, while below the stag is another portion of an animal figure. Fig. 161 has a simpler arrangement of seven animals in three rows; the animals are quadrupeds, and it is possible that boars were intended. This impression was found in the Round House of Stratum XI-A.

Animal Designs in Full Style (Plates LXXXVIII.c; CLXIX, Figs. 162-167). These seals and impressions contain animal designs which fill the entire area of the seal without regard for pattern. Hence these animal figures are not arranged in any formal series of rows or registers, but are primarily disposed in such a manner as to obtain a full composition. Three examples of this

style bearing human and animal figures have already been described on p. 185 (Figs. 100-102), where it was observed that the designs are rotary. Only one of the present specimens (Fig. 162) shares this characteristic, the others possessing an orthodox axis or alignment. Fig. 162, an incomplete impression from Stratum XIII, contains ibexes only; in Fig. 163, however, we have the commonly associated ibexes and salukis. The lower ibex on that specimen seems to represent the animal brought to bay by three salukis. An ibex, a mouflon, and four salukis appear on Fig. 164. Fig. 165 illustrates the design found on a number of seal impressions from Room 902 of the Stratum IX Temple. The central and largest figure is a carefully engraved ibex; two smaller, kneeling animals occupy positions above and in front. Over the head of the central animal are two fishes (see also Figs. 176 and 177).

The remaining pair of specimens are less typical of this so-called full style than those described above. Fig. 166, from Room C of the Stratum XI-A Round House, has only two animal figures (ibex and saluki), three ibex heads filling in the field of the seal. The seal shown in Fig. 167 (=Plate LXXXVIII.c) is one of the finest found at Gawra. Made of lapis lazuli, the engraving is of the highest quality and the figures of the salukis and fox (the latter has pointed ears and a long, straight tail) are perhaps more realistically shown than on any other specimen in our collection. Unfortunately, this seal was not found in stratified debris, but rather in dumped earth on the side of the mound. Its stratigraphic source cannot, therefore, be stated with any degree of certainty, but it is possible that it originated in Stratum XIII.

Designs of Animal Heads (Plates CLXIX-CLXX, Figs. 168-172). Although animal heads as a fill-in element are common in almost all types of glyptic design, a total of nine examples of designs consisting entirely of animal heads were found, of which six came from Stratum XI, two from XI-A, and one from XII. Mouflon and ibex heads are the only ones represented; the former may be seen in Figs. 168-170. Of these, Fig. 168 bears two heads in symmetric opposition, a feature not found on any other specimens. The heads of Fig. 170 are regularly arranged in a rotary pattern. An even

²² Perhaps similar to the plaque found in Stratum VIII; see TG., Plate LV.a, and Plate LVII, Fig. 29.

fuller style is illustrated by Fig. 169 where, however, the heads are divided into three rows, additional fill-in heads occurring on all sides. Ibex heads are shown in Figs. 171 and 172, both impressions made by rectangular seals. Fig. 171 has a rigid arrangement of three rows of heads. The design of Fig. 172 is more pleasing, and there is a careful observance of detail.

Designs of Birds and Animals (Plate CLXX, Figs. 173-175). Birds are a rare element of glyptic design; of the nine specimens found where birds are shown, all are represented with animal figures, an indication that birds of prey or vultures were probably intended. All examples were produced by three strata, viz., XIII, XI-A, and XI. Fig. 173 is the oldest example of the bird-and-animal design, and was found in the Stratum XIII Well, which produced two similar impressions. The central figures are two ibexes, over which are the hovering figures of two birds with outstretched wings. Above the ibex at the left is an indistinct sign that may represent a fish (cf. Figs. 165, 176, and 177). Figs. 174 and 175 show the birds perched on the backs of the animals, a scene that is repeated on examples from later levels.²³ In Fig. 174 an ibex head occupies the space over the vulture's back, while in front of the central ibex and at right angles to it is a saluki. The quadruped represented in Fig. 175 is probably a mouflon, shown in a reclining position.

E. NATURALISTIC DESIGNS—FISHES, SNAKES AND SCORPIONS

(PLATES LXXXVIII.a, b; LXXXIX.a;
CLXX, Figs. 176-184)

The remaining seals and seal impressions bear figures of fishes, snakes, or scorpions. Such examples are extremely infrequent, and are not found in the strata below XII, nor above X. Fishes are shown on a seal (Fig. 176=Plate LXXXVIII.a, No. 8) from Stratum XII, and on an impression (Fig. 177) from Stratum XI. The impression found in the Stratum IX Temple (Fig. 165), as well as Fig. 173, both of which have already been described, also bear representations of fishes in association with animal figures.

²³ TG., Plate LVII, Fig. 29.

Two intertwined snakes appear in each of the impressions illustrated by Figs. 178-180; in addition, three more fragmentary impressions bearing identically intertwined snakes were found which are not illustrated. A single snake appears with the two human figures in Fig. 87. Fig. 179 (=Plate LXXXVIII.b) is the most important of all these, for in the center of this incomplete impression, and apparently encircled by the figures of the snakes, is what may be part of a human figure, running left, with one arm bent and upraised (cf. Fig. 95). The right arm and the head of this figure are unfortunately missing. Made by a large and deeply cut seal, this impression fragment was found in Square 4-M of Stratum XII, near the White Room. With it were the impressions illustrated in Figs. 126 and 138.

The impressions covering the bulla from Stratum X shown in Plate LXXXIX.a were made by a square or rectangular seal. Unfortunately, these overlap so that a clear and complete impression is lacking, but this object is nevertheless of interest for two reasons. First, the impression contains the figure of a snake over a crouching animal (probably a lion), thus providing the only example of the association of snake and animal figures found at Gawra. Secondly, this bulla is also the only specimen in which the cords holding it terminated within the object. These string holes number four, and may easily be seen in our illustration. When the bulla was found, the holes still contained decayed remnants of the cord.

The remaining group of seals and impressions (Figs. 181-184) bearing the figures of scorpions need not detain us long. The drill marks next to the stylized scorpion figure in Fig. 181 have already been discussed on p. 182. The stylization of this design may quite possibly have resulted from the fact that the seal is made of obsidian. Fig. 182 is an incomplete impression from the Stratum XII White Room. A fill-in mark on Fig. 183, from Stratum XI-A, may be a tree or a crude human figure. The best delineation of a scorpion is to be found on Fig. 184, from Stratum X.

The seals and seal impressions just described have been classified by the type of design they bear, rather than by stratum. The stratum or deposit in

which each specimen was discovered may be found, with other details, in the Catalogue of Illustrated Specimens at the end of this volume; but the following table is subjoined in order to provide a convenient summary, by strata, of the glyptic material.

Area A	Figs. 11, 123.
Northeast Base	Fig. 141.
Stratum XIX	Fig. 1; Plate LXXXVIII.a, No. 6.
Stratum XVIII	Figs. 103, 140.
Stratum XVII	Fig. 51.
Stratum XVI	Figs. 15(?), 34.
Stratum XV	Figs. 3, 98, 104.
Stratum XIII Well	Figs. 29, 38, 39, 43, 48, 62, 64, 70, 92, 94, 100, 102, 133, 173.
Stratum XIII	Figs. 2, 5, 9, 37, 49, 52, 69, 95, 101, 105, 134, 162.
Stratum XII	Figs. 8, 14, 16, 17, 19, 24-27, 35, 40, 46, 50, 57, 63, 65, 67, 68, 71, 75, 76, 78, 83, 90, 91, 99, 107, 109-111, 122,

	124, 126, 128, 130, 132, 138, 139, 176, 179, 182; Plate LXXXVIII.a, No. 9.
Stratum XI-A	Figs. 10, 18, 30-33, 36, 45, 53, 60, 66, 73, 77, 79, 80, 82, 84-87, 89, 93, 97, 113-115, 127, 129, 142, 143, 154-156, 161, 166, 169, 174, 183.
Stratum XI	Figs. 6, 20, 21, 23, 28, 42, 55, 56, 59, 61, 72, 81, 88, 106, 112, 120, 131, 135, 144, 146, 147, 152, 153, 158, 159, 163, 168, 170-172, 175, 177, 180, 181; Plate LXXXVIII.a, Nos. 4 and 11.
Stratum X-A	Figs. 7, 13, 22(?), 145, 160, 164.
Stratum X	Figs. 41, 47, 54, 96, 108, 116, 125, 136, 137, 148-150, 178, 184; Plate LXXXIX.a.
Stratum IX	Figs. 12, 44, 74, 117, 118, 165.
Unstratified	Figs. 4, 58 (XII?), 119, 121 (XIII?), 151, 157, 167.

VII. BEADS, PENDANTS, AMULETS AND ORNAMENTS

(PLATES XC-XCII; CLXXI-CLXXV)

The objects described in this chapter have been classified into three main categories; viz., beads, pendants and amulets, and ornaments. Pendants and amulets have been grouped together in this account, as in Volume I, because of the difficulty of distinguishing between purely decorative pendants and those possessing a magical or ritual significance. The very few gold beads and ornaments discovered in the débris of the various building levels and in graves are described here along with their counterparts in other materials.¹

A. BEADS

(PLATES XC, XCI.a, XCII.a, Nos. 1-5;
CLXXI, Figs. 1-16)

Beads have been found in all levels and in the two soundings at the base of the mound excavated in the seasons covered by this volume; they were, however, most common in Strata XVIII, XII, XI-A, and XI, in which levels they most frequently occurred in graves. As a matter of fact, beads were rare in occupational débris, such examples numbering no more than a few dozen.

One of the most interesting facts emerging from the excavation of the cemeteries in various levels of the mound is that strings of beads were not only employed as necklaces, but as bracelets, anklets, and possibly girdles as well (cf. Chapter II, p. 88). In a grave in Stratum XVIII (Locus 7-57), beads were found at the wrists, pelvis, and ankles of the child occupying the grave; Nos. 1 and 3 of Plate XC.b show these beads in the same order. To judge by the evidence of still other graves, however, beads were more commonly worn as wristlets or anklets than as decoration for any other part of the body. This rule seems to have applied to both adults' and children's graves.

The number of beads found in graves, particu-

larly in those forming the necropolis of Stratum XII and overlying strata, sometimes mount into the thousands, and when restrung often reached a length of two or three metres. As most of these were tiny rings and cylinders, it is not surprising that their numbers should prove so large, but by far the greatest numbers of beads came from the tombs.

In Strata XIX through XVI the materials commonly employed in the manufacture of beads include obsidian, white paste, carnelian, limestone, and marble. In addition, a single string of beads found in occupational débris in Stratum XVI (Plate XC.a, No. 1) was made of baked clay. In levels succeeding XIII the most common materials were white paste, carnelian, obsidian, and limestone, as in the lower strata, but in addition turquoise, amethyst, lapis lazuli, agate, quartz, jadeite, beryl, diorite, haematite, steatite, and serpentine are also found, although these varieties of stone are more exceptional. The increased number of varieties of stone worked into beads encountered in Strata XIII, XII, and subsequent levels is another indication that new trade relationships were established at that time with mountain or highland areas where such kinds of stone are indigenous (cf. Chapter VI, p. 176, and Chapter VIII, p. 200).

Bone, ivory, and shell, as well as these various types of stone, were also employed in the production of beads; of these materials, however, only cowrie shells are common. These were used either in their natural form, or cut into discs and small rings. Plate XCI.a shows some cowries that have been roughly squared, or cut into cylinders and barrels.

As regards shape, almost all stone beads conform to a very few types, irrespective of the stratum in which they originated. Thus rings, discs, barrels, and cylinders are the overwhelming favorites in all levels, with a preponderance of tiny ring beads becoming especially marked in Strata XII through X.

¹ Beads, as well as pendants and ornaments from the tombs, have already been described in Chapter II.

Examples of these common shapes may be seen in Plate XC; the new spherical beads with drilled decoration shown in No. 3 of the former illustration are unique examples of their type and were discovered in a grave in Stratum XVIII (Locus 7-62).

Single examples of additional unusual types may be seen in Figs. 1 and 2 of Plate CLXXI. Both these beads have a lentoid section and elliptical plan. Fig. 3 is a bead spreader of lapis lazuli found in dumped earth, and hence of unknown date, although it is probably not earlier than Stratum X, and may possibly have come from a much later stratum. Fig. 4 is another bead spreader, also from the dump. This example is made of yellow sandstone, and is not earlier than Stratum XII. The lozenge-shaped bead, Fig. 5, was found near the southern tholos of Stratum XVI. The shape of this object; its material—a white paste—and its drilled decoration are all uncommon features. Fig. 6 is a conical white marble button from Stratum XV. It is the only object of this type yielded by Gawra, other than the engraved buttons with back-loops described in Chapter VI, and shown on Plate CLVIII, Figs. 1-3.

Engraved Beads (Plates XCII.a, Nos. 1-5; CLXXI, Figs. 7-16). In addition to the beads already described, Strata XV, XIII, XII, XI-A, XI, and X produced a small number of stone beads bearing engraved decoration. These are unknown below Stratum XV, and in levels overlying X, except for a single specimen from Stratum IX (Plate XCII.a, No. 2), which probably had been carried over from an earlier level.² Their absence from Stratum X-A, however, is probably due to an accident of excavation. These engraved beads are most common in Strata XV, XIII, and XII, and may be another manifestation of the foreign influences already noted in the pottery of Strata XIII and XII.³ All but one engraved bead (Fig. 16=Plate XCII.a, No. 3) were found in occupational debris.

Engraved beads are of two main types; the most

common is elliptical in plan, with a lentoid section (Figs. 7, 9-11, 13, and 14; and Plate XCII.a, Nos. 1 and 2). The second type, represented by only three specimens, of which two are illustrated (Figs. 15 and 16), is cylindrical in shape. Variations of the first type are shown in Fig. 8, which is lozenge shaped, rather than elliptical, and by Fig. 12, which has knobbed ends.

The engraving found on these beads is usually in intricate, tectonic patterns (Figs. 7-10), although simple crisscrossing such as on Figs. 13 (=Plate XCII.a, No. 5) and 14 also occurs. Quartered designs, suggestive of certain stamp seal patterns, are found on Figs. 11 and 12, while the two barrel beads (Figs. 15 and 16) have designs divided into registers. The varieties of stone employed in the manufacture of these engraved beads include black steatite (6), serpentine (3), mica schist (1), marble (1), and carnelian (2).

Gold Beads (Plate XCI.a). Gold beads are comparatively rare, and are usually found in graves or on hoarded necklaces. Only four scattered gold beads were found in occupational debris, all of which came from Strata IX and X; however, a cached necklace discovered in Stratum IX included an additional four gold beads, as well as the dove-shaped pendant or amulet of lapis lazuli illustrated in Fig. 65. Another cached necklace in Stratum XII, found within the small jar shown on Plate CXXXIX, Fig. 310, is illustrated in Plate XCI.a. This is graced with sixteen gold beads. A grave in Stratum X (Locus 47) yielded a gold headband which is described in Section C of this chapter, and a necklace of sixty-seven beads, of which fifteen were gold and two copper.

All gold beads, regardless of stratum, were spherical or barrel-shaped. The only exceptions to this rule were a single biconical bead from the Stratum X grave just mentioned, and three fluted spheres on the cached Stratum XII necklace (Plate XCI.a). Below Stratum XII beads of gold or other metals are unknown, but even in Stratum XII and in succeeding levels (if the beads and ornaments from the tombs are excluded), gold was not an important material in the Gawra bead industry, for as observed above, gold beads number only thirty-nine in those six strata.

² The engraved bead illustrated in *TG.*, Plate LXXXIII, No. 1, is from below Stratum XII.

³ Cf. the similarly decorated beads of identical shape found by Woolley; *al-'Ubaid*, Plate XXXVII, T.O. 413-416; and from Arpachiyah; *Ar.*, Plate VII.b, bottom row. It should be noted that all Arpachiyah specimens, and three of the four from Obeid are of terra cotta, while all engraved beads from Gawra are made of stone.

B. PENDANTS AND AMULETS
(PLATES XCII.b, XCII; CLXXII-CLXXV,
FIGS. 17-66)

Tanged Pendants with Engraved and Drilled Decoration (Plates XCII.b, Nos. 1-5; CLXXII-CLXXIII, Figs. 17-40). One of the largest groups of stone pendants and amulets are those characterized by a tang through which is bored a suspension hole. The bodies of these pendants are circular in plan as a general rule; however, oval and even amorphous shapes—such as may be seen in Figs. 18, 23, and 26-28—are not exceptional. The surfaces of this type of object are usually convex; less commonly they are flat, as in Figs. 20, 23, and 30.

Engraved linear and rectilinear designs are the most common, but shallow drilled holes also occur on numerous examples; as a matter of fact, this drilling technique is much more characteristic of this type of pendant than of stamp seals. In addition, three pendants bore naturalistic designs in the form of animal figures (Figs. 39, 40 and Plate XCII.b, No. 4).

Figs. 17-27 show pendants with engraved linear, rectilinear, and geometric designs. Some tanged pendants have rather aimlessly crossed lines forming the basis of their crude patterns (Figs. 17, 18, 23, 27 and Plate XCII.b, No. 1). These designs seem to have been applied haphazardly with the sole view of filling the surface to be engraved, rather than to form a balanced composition. Others, however, such as Figs. 20-22 and 24-26, have more formal patterns, some of which appear related to analogous designs on stamp seals (cf. Plates CLVIII-CLXI, Figs. 11-50 and Chapter VI, p. 177). The outstanding example, however, is Fig. 19, from Level D of Area A; this carefully engraved pendant has a well-conceived pattern based on a broad center-cross, which is filled with fine crisscrossed lines. The quarters of the circle formed by the center-cross are filled with connected chevrons. The pattern not only fills the face of the pendant, but is in fact extended over its tang, which is broader than that of any other member of this group. It is undoubtedly of some significance that the closest parallels to this engraved design are provided by painted patterns appearing on bowls and footed bowls from

Samarra,⁴ where the designs are so identical that some connection is strongly suggested.

Figs. 28-30 form a sub-group characterized by simple, crisscrossed decoration. The shape of Fig. 28 is unusual, for it possesses no well-defined, narrow tang as in other specimens. Figs. 30 and 32 are the oldest examples of the present group of tanged pendants, having been found in Burial B of the Area A Well. The tang of Fig. 30 is bored from back to front, rather than from side to side as are all other examples, with the additional exception of Fig. 21. The vertical columnar patterns of Figs. 20 and 21, and to a lesser extent, that of No. 2 of Plate XCII.b, are rare.

Figs. 31-37, and Nos. 3 and 4 of Plate XCII.b, all bear drilled holes in addition to linear engraving. The number of drillings occurring on these pendants varies from the single one to be found on Figs. 36 and 37 to the eighteen on No. 3 of Plate XCII.b. Fig. 31, from Area A, is the largest tanged pendant of our present collection. The holes on this example seem to have been made by a tubular drill, rather than by a point. The drillings on all of these pendants usually occupy the center of the pendant, with the linear engraved lines forming only a secondary, fill-in decoration. In Figs. 31 and 32, and Nos. 3 and 4 of Plate XCII.b, however, the holes are not so precisely arranged as on other examples. Fig. 35 from Stratum XIII has had its tang broken off. This specimen bears a quartered-circle design similar to those on stamp seals (Plates CLVIII-CLIX, Figs. 12-17), but each quarter of the circle formed by the center-cross is occupied by a four-petaled rosette; a refinement of design not to be found on any of the Gawra seals.

In passing, it may be observed that the drilling technique on this type of pendant appears to have been practised more extensively in Halaf times, that is, in Area A, the Northeast Base, Stratum XX, and even in Stratum XIX, than in the succeeding period.

The pendant shown in Fig. 38 is the least typical member of our present group. That specimen has the suspension tang, as well as the drilled and engraved decoration characteristic of all previous examples, but in all other particulars it is quite dis-

⁴ *AMI*, Vol. V, Figs. 52-54, 71, 72, 74, and 78.

similar. Thus, while the preceding examples were circular in plan, and usually lentoid in section, the present object is lozenge shaped, with a broader tang, and with flat surfaces. Even in its decorative design some divergence may be noted, for Fig. 38 bears a simple linear decoration of three opposed groups of parallel lines, and two rows of three drilled holes each, while the others were characteristically decorated with rectilinear or geometric patterns. Made of gray marble, this specimen was produced by Stratum XIX.

Three pendants with suspension tangs bore animal designs: Figs. 39 and 40, and Plate XCII.b, No. 5. All are relatively late in date, the latter coming from Stratum XV, Fig. 39 from Stratum XIII, and Fig. 40 from Stratum XII. Fig. 39, although incomplete, shows a horned animal, possibly an ibex. On Fig. 40 two animals are depicted, but identification here is more difficult, if indeed not impossible, since the quadrupeds are not horned, and their outlines were formed in part by the drilling technique. A gazelle may be shown on No. 5 of Plate XCII.b.

The shapes and decorative engraving found on tanged pendants have now been described, but the varieties of stone employed in their manufacture, and their stratigraphic occurrence remain to be discussed. To deal with the latter point first, this type of pendant was found in all strata from XX through XI, as well as in both soundings at the base of the mound. In addition, a single example, Fig. 37, was found in Stratum X. They are, however, far more common in the deposits of Area A and the Northeast Base, and in Strata XX through XV, than in the later levels of XIII through XI. The fact that many of these pendants from the upper levels are incomplete (Figs. 23, 27, and 36) is undoubtedly to be construed as evidence that they had been in use for long periods of time, like the back-looped button shown on Plate CLVIII, Fig. 2, which had been converted into use as a pendant long after its loop had been broken.⁵ At any rate, the earliest deposits yet investigated at Gawra, namely, the Well in Area A, yielded two of these tanged pendants, while altogether more than one-third of the total of forty-five tanged pendants were

produced by the two soundings at the base of the mound, and by Strata XX and XIX. The number of pendants found in all levels overlying XII total but five, so it is apparent from this fact of their distribution alone that, with the disappearance of the Obeid type of painted pottery, pendants of the tanged type had likewise ceased to be manufactured. Furthermore, their common occurrence in the incompletely investigated lower strata of XX and XIX, and in the soundings in Halaf deposits at the base of the mound, would seem to identify them more closely with the Halaf culture than with any other.⁶ That they continue to appear in Obeid levels and, in fact, until Stratum X-A is reached, is undoubtedly to be interpreted as another instance of the survival of a Halaf cultural product into the following period.⁷

Relatively few varieties of stone were employed in the manufacture of these objects. Marble, usually gray, light brown, or white in color, accounts for a full half of the specimens recovered. Of the remainder, serpentine and black steatite are the most popular varieties of stone, with no more than six or eight specimens having been made of quartz, obsidian, haematite, and amethyst. Black steatite pendants of the tanged variety are rare before Stratum XII; almost all examples of these pendants found in deposits earlier than XII were formed of marble, serpentine, quartz, or obsidian.

Tanged Pendants of Miscellaneous Types (Plates XCII.b, Nos. 6 and 7; CLXXIII, Figs. 41-44). Figs. 41 and 42, from Strata XII and XI, respectively, are simple open rings with suspension tangs. Fig. 41 is made of white paste, while Fig. 42 is one of the very few mother-of-pearl objects found at Gawra. Both specimens were found in the occupational debris of their respective levels, but are identical in shape with the ninety gold pendants or bangles found at the head of the occupant of Tomb 109 (cf. Chapter II, p. 89, and Plate CVII, Fig. 49), from Stratum X.⁸ Fig. 43 has a hemispherical section; the face of this pendant is

⁶ Most of the similar pendants recovered at Arpachiyah likewise seem to have originated in Halaf levels; cf. *Ar.*, Fig. 50, Nos. 1-9 and Plate VIII.a.

⁷ Cf. Chapter VI, p. 177.

⁸ A single ring with suspension tang was found at Arpachiyah; *Ar.*, Plate VII.b, third row, No. 889.

⁵ Cf. Chapter VI, p. 179.

flat and bears faintly engraved crisscross lines. Found in Stratum XI, it is made of black granite, a rather unusual type of stone in a pendant. Fig. 44 is a black steatite amulet of anthropomorphic shape, with a broken suspension loop. The bifurcated extremities of this pendant or amulet, as well as its convex middle, present a rough analogy to those features on terra cotta figurines of the Mother Goddess, although there is of course a distinct possibility that this resemblance is entirely superficial and unintentional.

Two interesting types of tanged pendants are illustrated in Plate XCII.b, Nos. 6 and 7. The first of these is drop-shaped, and has flat surfaces, of which one is deeply ribbed horizontally. Made of serpentine, this specimen was unearthed in Square 5-G of Stratum XIX, and is identical with a pendant from Arpachiyah.⁹ No. 7 of the same plate shows a very unusual type of pendant, consisting of a globular body and a long stem or tang. The lower part of the sphere has a few crisscrossed lines engraved on it. Made of black steatite, it was discovered in Stratum XII.

Pendants with Bored Suspension Holes (Plates XCI.b; XCII.a, No. 8; XCII.b, No. 8; XCII.c, No. 1; CLXXIII-CLXXIV, Figs. 45-58). Pendants with bored suspension holes, but without the tang characteristic of the pendants previously considered, are the most common type at Gawra, occurring in all strata and deposits. A variety of shapes are included in this group of objects, but the simplest form, and the most common, is that illustrated by Figs. 45, 46, and Nos. 5 and 7 of Plate XCI.b, where pebbles having flat surfaces were utilized in their natural state. Several additional examples were found, all undecorated and similar in shape to those illustrated. The only "pebble" pendant to have any decoration is Fig. 46, but the crude and incomplete nature of these scratchings makes it doubtful that they were intentionally produced.

The decoration of Figs. 47 and 48, and of Nos. 3 and 10 of Plate XCI.b is less ambiguous. Figs. 47 and 48, both from Stratum XII, have crisscrossed patterns similar to those found on some of the pendants with suspension tangs, and on certain of the seals described in Chapter VI. The rather unusual,

roughly hemispherical shape of Fig. 47 may suggest that it is a re-used piece of a back-looped button; a type of object which bears similar decoration. (Cf. Plate CLVIII, Figs. 1-3.) The same type of decoration is found on No. 3 of Plate XCI.b, from a grave in Level XIX (Locus 7-80). Here again the unusual central position of the suspension hole suggests that this object is a re-used and reworked pendant of another type—possibly having been tanged originally. No. 10 of the same plate has both drilled and engraved decoration in an uninteresting pattern. No. 8 of Plate XCII.b is of better workmanship and comes from Stratum XX. On this specimen the surface was divided into halves; in each half, a pair of concentric circles were engraved, and the inner circle of the upper pair was then drilled through to provide a suspension hole. Of even greater interest and significance is Fig. 56, a crudely shaped pendant or amulet with a single suspension hole and slightly convex surfaces, which was found just below Stratum XIX. Faintly engraved on one of its surfaces is the only representation of a swastika yet discovered at Gawra, although known (as a painted design on pottery) at Samarra and at various Iranian sites such as Susa and Tell-i-Bakun A.

All other suspension-hole pendants remaining to be described are undecorated. Fig. 49 is a pendant of simple conical shape from Area A. Several drop-shaped, undecorated pendants may be seen on Plate XCI.b, Nos. 5, 6, 9, and 11. Nos. 6 and 9 are of green steatite or serpentine; the latter is crudely shaped. No. 11, *ibid.*, is of gray marble, and was fashioned from a vessel fragment. Nos. 1 and 2, as well as No. 3 (described in the preceding paragraph), were found in Strata XIX and XVIII; these, with No. 12, from Area A, are among the earliest specimens of this type of pendant to be recovered.

Fig. 55 illustrates one of two extant examples of a variety of disc-shaped pendant characterized by two suspension holes set closely together. This specimen is identical with one from Tomb G36-135 which has been attributed to Stratum XI (Plate CVII, Fig. 52), but is of a much earlier period, since it was uncovered in the debris of the Northeast Base. Both objects are made of obsidian. Also of

⁹ Cf. *Ar.*, Plate VII.b, second row, No. 886 (B).

obsidian are Fig. 50, a lozenge-shaped pendant having a single suspension hole, probably from Stratum XV, and Fig. 51, from Stratum XIII. In all particulars these specimens are identical with Fig. 70 and Plate XCII.c, No. 3 (described in Section C of this chapter), but lack the double, opposite holes of those objects. Because of the single hole of each of Figs. 50 and 51, and the closely set double holes of Fig. 55, it is only possible to describe them as pendants, whereas the number and position of the holes on Figs. 67-71, and Nos. 2 and 3 of Plate XCII.c, prove the use of those objects as ornamental studs.

Figs. 52-54, 57, 58, and the object shown on Plate XCII.c, No. 1, are suspension-hole pendants of specialized shape, most of them being isolated examples of their type. Whether these were employed merely as decorative objects, or whether they possessed a magical, religious, or ritual significance, and should, therefore, more correctly be termed amulets, is a problem which cannot be solved with the evidence now at hand, although the latter possibility seems the more likely. The earliest specimen is illustrated in Fig. 52, and comes from Level D of Area A. Made of obsidian, and with a single hole drilled through its knob-like top, this object has an anthropomorphic shape which is paralleled by Fig. 53. The latter—which is also of obsidian—comes, however, from unstratified débris. A third obsidian specimen, from Stratum XVI, is shown in Fig. 54. This lacks a suspension hole, but the object was probably fastened around one of its knobbed ends. The surfaces of the present specimen, as on the preceding pair, are flat, but it has flaked edges, which possibly suggest that it was originally a blade, and later had been recut into its present form.

The double-axe pendant or amulet reproduced on Plate XCII.c, No. 1, is of a type well known at Arpachiyah.¹⁰ Found in Stratum XVIII, and made of black steatite, our specimen is badly worn. Each end of the axe-shaft is transversely bored through for suspension. The S-shaped pendant, Fig. 58, comes from Stratum XI and is made of gray marble. Fig. 57, from Stratum IX, is of black steatite, incised spirally; the top is missing. Ambiguously included under this heading is No. 8 of Plate

XCII.a, from Stratum XII. This object lacks the suspension more characteristic of all other members of the present group, but has a groove encircling the middle, by means of which it was undoubtedly suspended. It has flat surfaces and an ovoid plan, and is made of breccia.

Pendants or Amulets in Naturalistic Shapes (Plates XCII.a, Nos. 6 and 7; CLXXIV-CLXXV, Figs. 59-66). An unusual pendant or amulet, duplicated by only one other Gawra specimen found in Tomb C of Stratum IX origin (Chapter II, p. 89 and Plate LVI.c, No. 3), is reproduced in Fig. 59. It is a faithful replica in stone of an acorn, with only part of the original suspension loop now remaining. Whether oaks were to be found on the now treeless plains surrounding Gawra at the time of Stratum XI-A, in which this object was found, may be doubted. It is more likely that they occurred in the mountains and highlands of the north and east, and the present amulet may indeed represent an importation from one of those areas.

Two finely carved stone miniature bull's heads are shown in Figs. 60 and 61, while a third, made of terra cotta, may be seen in Plate XCII.c, No. 4. The first of these was found below the floor level of Stratum XVIII, but above the walls of XIX; consequently, it most probably belongs to the upper stratum. Fig. 61, on the other hand, was found in Stratum XVI, as was the terra cotta specimen. Figs. 60 and 61 are of gray marble, and constitute two of the finest and most delicate examples of the lapidary's art of this early period. Fig. 60 has a slight tang projecting from the top of the head, which was bored through for suspension; Fig. 61 has a broken suspension hole in the lower part of the head. The terra cotta head illustrated in Plate XCII.c, No. 4, is identical in all respects with its stone counterparts, but is of inferior quality. Bukrania form a common painted pattern on Halaf pottery; possibly these pendants or amulets exemplify a cultural survival from Halaf times into the succeeding period.

No. 62 is a reproduction of the figure of a dog. The breed cannot now be identified, but the saluki, common on stamp seals, is definitely not represented. The surfaces of this pendant are flat; a hole is bored

¹⁰ *Ar.*, Plate VI.b, top row.

through the animal's shoulder for suspension purposes.

In Fig. 63 (=Plate XCII.a, No. 7) and Figs. 64-66 we have bird-shaped pendants or amulets; the first two of these may conceivably have been intended to represent ducks,¹¹ even though from widely separated stratigraphic contexts (Area A and Stratum XI). Both are of marble. On the other hand, Figs. 65 and 66 from Strata IX and X, respectively, more probably represent doves. Fig. 65 is of lapis lazuli, and was found with a necklace of forty-five beads, composed chiefly of carnelian and lapis discoids, but which also included four gold spherical beads. The folded wings of Fig. 65 are represented by incised lines; a hole bored through the body behind the neck accommodated the suspension thread. Fig. 66 is a more conscious attempt at naturalistic reproduction. The lower part of the body of this amulet is formed of gold; the upper is of lapis lazuli. Engraved lines mark the folded wings and tail feathers; the head is unfortunately missing. No. 6 of Plate XCII.a is apparently a phallic amulet. Although from the dump, it is probably not earlier than Stratum X or later than VIII.

C. ORNAMENTS

(PLATES XCII.a, Nos. 9-13; XCII.c, Nos. 2, 3; CLXXV, Figs. 67-76)

Ornamental Studs with Multiple Borings (Plates XCII.a, Nos. 9 and 10; XCII.c, Nos. 2 and 3; Plate CLXXV, Figs. 67-71). All but one of the objects included under this heading are either elliptical or lozenge shaped. All are bored through in either two or four places, the holes in every instance being set on opposite sides of the object. In addition, two examples (Figs. 67 and 68) have a deep groove connecting the two drillings, and extending beyond the holes to the edge of the object. All are made of black stone, with seven of the total of nine extant specimens having been made from obsidian, and one each from a dark-colored serpentine and black steatite (Figs. 67 and 68).

It is not possible to describe these objects as pendants, since all of them possess more than a single hole. Furthermore, the multiple holes drilled

through them, and the contraposition of these holes indicate that they were probably used as ornamental studs sewn on garments, headbands, girdles, belts, or other articles of clothing or adornment, like the later gold rosettes (cf. Fig. 76 and Plates CVII-CVIII, Figs. 53-58). It is possible, of course, that such examples as Figs. 67 and 68 may have been employed as beads or bead-spreaders,¹² but the absence of interior borings in these objects would have made them extremely clumsy if employed in that fashion. In addition, it should be noted that the lozenge-shaped object shown in Plate XCII.c, No. 3, lacks the groove characteristic of the two preceding examples, while No. 2 of the same plate has no less than four drilled holes, which would seem to prove their use as ornamental studs. Fig. 71 is the only specimen of the present group to have a rectangular shape. Two drilled holes occur on this specimen, one at each end. In this characteristic, as well as in shape, our Gawra example is duplicated by a more substantial number from the neighboring site of Arpachiyah.¹³

The ungrooved ornamental studs with two or four bored holes, of the type represented by Figs. 69-71, and Plate XCII.c, Nos. 2 and 3, were discovered in both soundings at the foot of the mound, and in Strata XIX and XVIII. In addition, a single specimen (Fig. 71) was produced by Stratum XVI, while a battered and carried-over example of this type was discovered in as late a context as Stratum VIII or IX (Plate XCII.a, No. 10). The grooved examples (Figs. 67 and 68), on the other hand, seem to be members of a later type, for Fig. 68 adorned the occupant of an urn burial in Stratum XII, while Fig. 67, although from dumped earth, is definitely not earlier than Stratum XV. Thus the ungrooved, multi-holed, ornamental studs are at Gawra restricted to Halaf and early Obeid times, and may have formed the prototype for the later grooved objects. No ornamental studs of either variety are known in levels above Stratum XII, with the single exception of the example discovered out of its original context and mentioned above.

¹² *Ar.*, Plate VI.b, second, fourth, and fifth rows, and p. 98 where they are described as beads.

¹³ *Ar.*, Plate XI.b. On p. 97 Mr. Mallon states: "It seems likely that they were sewn on to a stuff and formed part of a decorative headpiece."

¹¹ *Ar.*, Plate VI.b, third row, Nos. 870-872, and Fig. 51, Nos. 7 and 8.

Nail-Shaped Studs (Plates XCII.a, Nos. 11-13; CLXXV, Figs. 72, 73). Only four of these curious stone objects were discovered; two in Stratum XVI and one each in Strata XIII and XII. Their precise function is not known; the few Gawra specimens may possibly have been used as ear studs,¹⁴ or they may even have had some obscure amuletic significance.

Gold Ornaments (Plate CLXXV, Figs. 74-76). Of the few gold ornaments included in this chapter, two of the illustrated specimens (Figs. 74 and 76) were found in a child's burial sunk into Stratum XI-A (Locus 181). The rosette shown in Fig. 76 is a duplicate of a number of others from the Gawra tombs. Four holes around the conical center of the rosette provided means of attachment, but it should be noted that unlike most of the rosettes from the tombs, the center of Fig. 76 is a projection formed of the same sheet of gold, rather than a conical stone set into place with bitumen

¹⁴ Woolley suggests their use as nose studs; *al-'Ubad*, p. 153 and Plate XIII, Nos. 6 and 7, where the nails depicted have wide, flat, disc heads, and are longer than the Gawra specimens.

(cf. Chapter II, p. 90). Fig. 74 is a thin gold disc with engraved design; both of these objects were found at the head of the skeleton. Another rosette that is not illustrated was discovered in the youth's grave in Stratum XI-A (Locus 142) that produced the fine stone mace-head shown in Plate XCIV.d and f. Stratum XI yielded a gold pin, while in a stone-covered grave in Stratum X (Locus 47), and encircling the head of the skeleton, was a headband of gold 374mm. long, 14mm. wide and about .05mm. thick. This was undecorated, but each end was perforated to permit fastening. In addition, the same person wore a necklace which included fifteen gold spherical beads, and two of copper (cf. Section A of this chapter).

The beetle-shaped ornament or amulet to be seen in Fig. 75 was found in the occupational debris of Stratum X-A. A piercing near the bottom of the object perhaps served as a suspension hole; in the center is a rectangular depression. This ornament is formed of bitumen covered with gold leaf, and is identical with a number found in infant burials of Stratum VIII.¹⁵

¹⁵ TG., Plate LXXXIV, No. 24 and p. 136.

VIII. STONE OBJECTS

(PLATES XCIII-XCVII; CLXXVI-CLXXXI)

With the exception of clay, stone was the material most commonly used by the inhabitants of Gawra in their industries. From the numerous varieties available to them were fashioned objects having a wide functional variety. Many types of objects already encountered in clay were duplicated in stone by the Gawra artisans, either for the greater esthetic appeal contained, for example, in a variegated piece of marble, or for the greater hardness and durability imparted by stone. Many other varieties of stone objects, however, such as celts, mace-heads, and cutting and scraping implements, have no clay analogues, since that material could not produce the requisite hardness or sharp edges.¹

As a means of reflecting cultural or commercial relationships, stone is not as valuable a medium as pottery. However, the fact that certain varieties of stone which have no natural sources near-by are found fashioned into artifacts at Gawra indicates that trade relations even in ancient times reached across considerable distances. For example, obsidian could be obtained from the Lake Van region of Asia Minor (the nearest source of supply), while lapis lazuli, alabaster, steatite, and serpentine, as well as other kinds of stone were imported from present-day Iran. The original sources of other varieties found at Gawra, such as haematite, flint, chert, breccia, and granite have not yet been located, but may have been brought from those regions, or from others with which connections have been hitherto unsuspected. Local quarries yielded basalt, limestone, and the comparatively soft gray-and-white or green-and-white marble now known as Mosul marble. Possibly the sources of tufa and oölitic limestone were also located near-by. Bitumen was often used to haft stone implements, particularly obsidian blades, and to repair cracked pottery and other objects; the main sources of this material occur south of Mosul, as well as in the neighborhood of Kirkuk.

Stone seals, beads, pendants, and ornaments pro-

¹ Clay tools, found at el-Obeid and other sites, but unknown at Gawra, are apparently an exception; cf., however, *al-Ubaid*, p. 151, footnote 2.

duced at Gawra in the strata covered by this volume have already been described in previous chapters, as well as the superb stone objects from the tombs. Our present description of stone artifacts is therefore confined to various kinds of weapons, tools, and household objects which have been classified into sixteen groups. These are: (A) Implements of flint and obsidian; (B) Cores; (C) Blade handle; (D) Celts; (E) Mace-heads; (F) Hammer-stones; (G) Pestles and grinders; (H) Spindle whorls; (J) Gaming pieces; (K) Weights; (L) Whetstones; (M) Mortars; (N) Palettes; (O) Vessels; (P) Human figurines; and (Q) Varia. The most common of these various types of stone objects are the flint and obsidian implements comprising the first group.

A. IMPLEMENTS OF OBSIDIAN AND FLINT (PLATES XCIII.a, Nos. 1-4; XCIII.b, c; CLXXVI, Figs. 1-17)

The earliest implements are illustrated in Plate XCIII.a, Nos. 1-4, and in Plate CLXXVI, Fig. 1. All come from Area A, but Fig. 1, which was found near the mouth of the Well in Area A, is therefore the oldest specimen. No. 1 of Plate XCIII.a was probably hafted halfway down its length, as shown by the rough chipping of the upper portion and the thinner section and rounded point of the other half. No. 2, *ibid.*, is the only flint implement recovered from the soundings at the base of the mound. Peculiar to Area A and the Northeast Base soundings is a variety of obsidian that is chocolate brown in color. Presumably the people responsible for the accumulation of the deposits in these areas obtained their obsidian from a source unknown to or ignored by the inhabitants of Stratum XX and overlying levels, where this unusual kind of obsidian is never found. Eight additional obsidian implements and chips were found in the two sounding areas that are not illustrated; none requires special comment as to form or workmanship.

Strata XX through XVII altogether produced less than a half-dozen obsidian or flint implements,

a circumstance that is probably explained by the fact that these levels were excavated only within narrow limits, so that a fair sample of all kinds of objects could not be expected. Stratum XVI, which was excavated to a greater extent than the underlying deposits, tends to bear out this explanation, for more than a dozen implements were discovered in that occupational layer, some of which are shown in Plate XCIII.b and c. Of these, scrapers and blades occur in about equal numbers. The most interesting fact to be gleaned from a study of the Stratum XVI objects is that half of them are flint artifacts; in all other levels, obsidian is the more common material.

Stratum XV was barren so far as the implements under discussion are concerned. This curious circumstance is only partially explained by the fact that this level was sparsely occupied. Most likely their absence is due to an accident of excavation, for in Stratum XIII they reappear in even larger numbers than before. Smoky obsidian makes its first appearance in Stratum XIII, which also yielded a single implement made from the clear, transparent variety of this natural glass. The more usual form of obsidian in all Gawra deposits is greenish-black in color, usually translucent in thin sections, as for example at the edges of the implements, but opaque otherwise. One example of smoky obsidian was found in the Stratum XIII Well in the form of a small knife.

The number of obsidian and flint implements found in Stratum XII shows a marked increase over the preceding levels; an increase that is continued in the remaining strata, or through Stratum IX. Each of these strata yielded from forty to fifty fragmentary or complete implements, representing the peak of production of these objects in the strata covered by this volume. The number of implements found in Stratum VIII, however, mounted into the hundreds, that stratum together with Stratum VII marking the end of the Chalcolithic period. With the introduction of copper into common use in the subsequent strata, stone implements ceased to be manufactured in any important quantities.² Strata XII-X thus show a gradual increase to the peak of production reached in Strata VIII and VII.

To return to the stone implements produced in

Strata XII through IX, these are illustrated in Figs. 2-16 and present several interesting features. Drills are found in some numbers for the first time in Stratum XII (Figs. 3, 4, and 6), but blades and scrapers are much more numerous. The blades tend to become longer and narrower in these levels, which may be interpreted as evidence of greater skill in flaking. Implements with serrated edges are uncommon. Three fragments of blades made of clear obsidian were found; one each in Strata XI-A and XI, the other in Stratum IX. Flint implements, while not uncommon, occur less frequently than those of obsidian. Almost all implements, whether cutting blades or scrapers, lack the triangular section featuring the implements of earlier strata, but occasional specimens with a triangular section do, however, occur (Fig. 14).

More interesting is the evidence obtained as to the manner of hafting these implements. Bitumen was usually employed for this purpose, as in Fig. 15 (from Stratum XII), where the bitumen covers most of the blade, leaving only the cutting edge exposed. A similarly hafted razor was found in Stratum XI-A (Fig. 16), while a fragmentary, unillustrated specimen was discovered in Stratum XI. Possibly clay was also used for hafting stone implements (cf. the bone awl, Plate XCIX.c, No. 1), but none was found with a handle of this material. For a still more elaborate stone handle see Fig. 18, described in Section C. Fig. 17 is ambiguously included under the present heading, as it is made of mother-of-pearl; an unusual material at Gawra. This object is shaped like the stone handle, Fig. 18, but must have been used for cutting or scraping, or even as a pendant.

Before passing on to other types of stone objects, it should be noted that no stone arrowheads have been found in any of the levels or unstratified deposits described in this volume. This fact suggests that the bow was a later invention, perhaps having been introduced in Stratum VIII where arrowheads first occur.

B. CORES (PLATE XCIV.b)

The flint core shown in Plate XCIV.b comes from Stratum IX, and is typical of more than a

² TG., 84.

dozen additional specimens, of both flint and obsidian, from Strata XII through IX. This number is surprising in view of the fact that both flint and obsidian were imported and were therefore of some value. Under such circumstances it might be expected that the cores would immediately have been worked into implements, and that few cores would therefore have been found. Not only are cores comparatively frequent—at least in the upper levels—but some have had only a few flakes struck from them, retaining for the most part their original natural surfaces. The illustrated specimen is, of course, a worked core. A single obsidian core was found in Tomb 109 (attributed to Stratum X), but obsidian blades were a more common article of tomb equipment.

C. BLADE HANDLE (PLATE CLXXVI, FIG. 18)

The unique object illustrated in Fig. 18 was discovered in Stratum XI-A (Square 5-J). It is a razor handle of gray limestone, having a fairly deep groove or slit in its lower edge. The flint or obsidian razor blade was set into this slit, and held there with the aid of bitumen, traces of which remain. In shaving, the object was held exactly like the modern straight razor; the notch in the grip accommodating the fourth finger, while the second and third fingers rested on top of the handle, precisely as the straight razor is held today. The upper edge of the grip is flat where the fingers were intended to rest, but arches slightly over the blade slit to a rounded end. This interesting object is apparently without parallel elsewhere.

D. CELTS (PLATES XCIII.a, Nos. 5-9; XCV. a-c; CLXXVII, FIGS. 19-28)

This popular type of stone implement is represented by nine examples from Area A and the Northeast Base. Strata XIX-XVII yielded from four to seven celts each, and Strata XVI and XV six each. In Stratum XIII the number increases to fifteen, while Stratum XII is represented by no less than fifty specimens. It will be recalled that flint and obsidian implements showed the same marked increase in Stratum XII, and it is possible that both

circumstances may have resulted from the opening of new trade relationships with mountain areas where those varieties of stone were found. Such connections may have first been established in Stratum XIII, which contained more stone artifacts of all kinds than the levels antedating it, but their full commercial exploitation was probably realized only in Stratum XII. After Stratum XII, however, the number of celts gradually diminishes in each of the succeeding strata until it becomes a mere dozen in Stratum IX. Thus the stratigraphic distribution of celts is not exactly paralleled by flint and obsidian implements, but it is, as observed below, duplicated by the distribution of mace-heads, hammer-stones, and grinders. In general, therefore, the situation may be summed up as follows. Most types of stone implements (as well as stone seals), although known in all strata up to XIII, become much more common in that stratum, and particularly in Stratum XII, after which their popularity declines steadily until it reaches the former low point. The explanation for the marked downward trend in this frequency curve after Stratum XII need not long be sought, for in Chapter IX it will be seen that copper implements, particularly axes and adzes, make their first important appearance in Strata XII, XI-A, and XI. As a result of the introduction of this new material, objects of the same type in stone, especially celts, fall into disfavor, although continuing in limited use. The only type of stone implement that is unduplicated in metal at this time, viz., cutting and scraping blades, remains popular throughout all later occupations; cf. Section A of the present chapter.

To proceed now to a detailed description of the celts, all are polished, rather than flaked, and show little or no technical or typological changes from Area A to Stratum IX. The typical celt from all these deposits is quite small, ranging from 25 to 55mm. in length. Some larger celts occur, but are exceptional (Plates XCV.b, No. 3; XCV.c, No. 5). Butts are usually slightly rounded, although some flat butts were made; cutting edges are almost always straight. The sides of these celts often expand to the cutting edge from the butt (Figs. 20, 22-26), a shape necessitated by the hafting technique employed, which consisted merely of binding the celt

on a wooden handle.³ Stratum XVI furnished one specimen (Fig. 19) which may have been hafted otherwise; this is deeply grooved on both sides, and around the butt and cutting edge, presumably to accommodate the binding thongs which held it to a handle. Fig. 20 shows a celt with an unfinished boring near the butt; Fig. 21 illustrates another bored through.

The varieties of stone employed include greenstone, granite, and marble, which are most popular throughout all periods. Less commonly used were diorite, haematite, slate, and, in Strata XII through IX, basalt.

E. MACE-HEADS

(PLATES XCIV.d-f; XCVII.a, Nos. 3-5;
CLXXVII, Figs. 29-37)

Forty mace-heads were discovered in the occupational débris and graves of the strata under consideration. Their vertical distribution may be summarized as follows:

TABLE A

Stratum	
XVIII	1
XVII	0
XVI	2
XV-A and XV	0
XIII	4
XII	19
XI-A	5
XI	5
X-A	1
X	2
IX	1

From this table it may be seen that no mace-heads have been found in deposits earlier than Stratum XVIII. Although mace-heads occur in Strata XVIII and XVI, none were found in Strata XVII, XV-A, and XV, and the first stratum to yield more than isolated specimens was XIII. In the succeeding occupation of XII, however, no less than nineteen were discovered, this peak figure decreasing to five each in Strata XI-A and XI. This reduced level of popularity is retained in Strata X and IX, for although only three are listed above as from those

strata, an additional nine mace-heads were found in tombs which had originated in X and IX (cf. Chapter II, p. 85). The stratigraphic distribution of this type of stone weapon thus furnishes additional evidence of the expansion of the stone industry in Stratum XII, as has already been noted in connection with flint and obsidian implements and celts.

The earliest mace-head was found in Stratum XVIII (Plate XCVII.a, No. 4). Made of haematite, this specimen is small, measuring only 37mm. in height, and 49mm. in diameter; it has a flattened top and base, and squat, rounded sides. Another specimen, almost identical in shape and dimensions, and also made of haematite, came from Stratum XVI (*ibid.*, No. 5); the second Stratum XVI mace-head is illustrated in Fig. 29, and is again of the squat variety. One of the three mace-heads from Stratum XIII is illustrated in Fig. 36; the conoidal shape of this example is unusual, as well as its miniature size. Fig. 31, from Stratum XII, is the latest example of the squat-shaped mace-heads, which in that stratum seems to have been superseded by mace-heads having a piriform or barrel-shaped outline (Figs. 32-35). Fig. 30 shows one of the most elaborate specimens, made of white marble with brown veins. The pentagonal plan of this object, which is formed by its outlined bosses, is paralleled only by Fig. 21 of Plate CIV, from Tomb 114 (Stratum X), although the present specimen comes from Stratum XII.

In contrast to the first main type of mace-heads, which originally had a squat shape that later became piriform or barrel-shaped, a second type illustrated by only two specimens is characterized by a canoe-shaped outline. The first of these is shown in Plate XCIV.e, and was found near the Northern Temple of Stratum XIII. Made of white marble, it is hemispherical in elevation, and is carefully shaped and smoothed. The second is shown in Plate XCIV.d and f. This has a vertical projection at each end of the object, and is one of the finest mace-heads produced by any level of Gawra. The material is gray slate, and it was discovered in a grave (Locus 142) sunk into Stratum XI-A which also contained a gold ornament.

Two types of stone are most generally found worked into mace-heads; the most common variety

³ Mallowan, *Ar.*, Fig. 52, No. 12 and p. 102, describes the remains of a wooden handle on which a stone celt was so hafted.

is marble, closely followed by haematite. Other kinds of stone usually employed in the manufacture of celts, such as greenstone, granite, diorite, and basalt are not found in mace-head form, although single examples of oölitic limestone, alabaster, and serpentine mace-heads were uncovered.

Included in the present group is the object of doubtful use shown in Fig. 37, found in Stratum XIII. Long and cylindrical, it resembles none of the other mace-heads from any stratum, but may have been intended as such. The shaft hole of this specimen is incomplete; borings were made at both ends, and in one of these is a small tang formed by the boring tool. Basalt is the material.

F. HAMMER-STONES

(PLATES XCIV.a, c; XCVII.a, No. 2;
CLXXVIII, Figs. 38-43)

These were most popular in Strata XI and IX, with eleven and eight specimens respectively, but hammers are represented by a few examples in all of the lower levels from XI-A through XVI. Figs. 38 and 39, from Stratum XV, illustrate an early type characterized by pointed heads and flat butts; two additional, unillustrated specimens, both made of greenish granite, were found in Strata XVI and XV. Plate XCIV.c shows a hammer-stone from Room 72 of Stratum XI-A. The outlines of this specimen are roughly similar to those of Figs. 38 and 39, but it is longer and narrower, and lacks the pointed end of those prototypes. Made of black marble, the surfaces of this object are highly polished.

A second, "boat-shaped" type, illustrated by Fig. 41, first appears in Stratum XIII, and continues a favorite in all succeeding strata through VIII.⁴ A large majority of all hammer-stones found in Strata XIII through IX belong to this type, which is commonly made of basalt. A flat, rectangular variety of hammer also achieved some popularity in Strata XII, XI-A and XI (Figs. 42 and 43), but is restricted to those strata. Along with the more common "boat-shaped" variety, a lozenge-shaped variation of this form appears which features sharply

pointed sides, head and butt (Fig. 40). The unusual triangular hammer illustrated in Plate XCIV.a is made of basalt and was discovered in Stratum IX.

G. PESTLES AND GRINDERS

(PLATES XCVI.b; CLXXVIII, Figs. 44-47)

Pestles were found in the Well in Area A and in the Northeast Base sounding, as well as in all levels overlying Stratum XVIII. Basalt, granite, and marble are the common varieties of stone used, of which basalt is the most popular. Figs. 44 and 45 are forms typical of a large number.

Rubbing stones or grinders are shown in Figs. 46 and 47, and in Plate XCVI.b. Like the pestles, these are usually made of basalt, granite, and marble. The lower, grinding surface is often highly polished through use. Generally conoidal or hemispherical in shape, a few members of a type having a narrow waist were also discovered (Fig. 46 and No. 2 of Plate XCVI.b). A single perforated specimen (Fig. 47, from Stratum XI-A) may also have seen use as a weight.

The stratigraphic distribution of these grinding or rubbing stones is of interest particularly when considered in regard to that of the nail-shaped mullers of terra cotta described in Chapter V.⁵ The latter, to which we have assigned the same function as these stones, were common in Strata XIX through XIII, with a few surviving into Stratum XII. Examples of the present group of grinding stones first appear in Stratum XIII, and continue in use through IX, as well as in Levels VIII-III. In other words, these two groups of objects—nail-shaped mullers and stone grinders—stratigraphically overlap only in Strata XIII and XII, when the earlier nail-shaped mullers were being discontinued, to be supplanted by the stone grinders. The theory that the nail-shaped objects were employed as a grinding tool is, therefore, strengthened by this fact. Furthermore, we have here additional evidence of the expansion of the stone industry in Strata XIII and XII which has already been noted in connection with other classes of stone objects.

⁴ A single nail-shaped muller made of stone has already been described with those made of terra cotta; Chapter V, p. 169, and Plate LXXXIII.f, No. 5.

⁵ TG., 88.

H. SPINDLE WHORLS (PLATE CLXXIX, FIGS. 48-50)

Clay is the more popular material for this type of object, for only fourteen stone spindle whorls have been found, all in Stratum XII and overlying levels. Soft stones, such as steatite and serpentine, were usually employed in their manufacture, but some marble examples also occur. Their shapes and decoration require little comment, since in all respects these are paralleled by their terra cotta analogues. The rectangular outline of Fig. 49 is, however, unique.

J. GAMING PIECES (PLATES XCVI.a; CLXXIX, FIGS. 51-53)

Stone gaming pieces are as common as those in terra cotta, but the gaming pieces made of the latter material occurred chiefly in Strata XIX through XI-A (cf. Chapter V, p. 170), while their stone counterparts are found, with the exception of only a very few examples, in Strata XI-A through IX. Thus we have in gaming pieces the same shift from a terra cotta medium to stone that we have already noted in connection with mullers and grinders, although in the present type of object the change takes place somewhat later. Moreover, the stone gaming pieces are simpler in shape than the earlier terra cottas, consisting for the most part of simple spheres, discs, and hemispheres. That these stone objects are indeed gaming pieces is proved by the discovery of what is probably a complete set consisting of four spheres, three hemispheres, and two additional hemispheres with conical knobs, all made of alabaster, near the hands of a child occupying a grave (Locus 181) in Stratum XI-A (Fig. 53 and Plate XCVI.a, Nos. 2, 3, 5, 7-12). The variety of stone employed is an almost certain indication that these objects are not to be described as weights, for a heavier, harder stone such as haematite or marble would be expected in a scale weight, rather than alabaster, which is relatively light, and moreover wears and scratches easily.⁹

⁹ Cf., however, the remarks made in Chapter II, p. 85, in regard to the stone spheres found in the tombs. It is, of course, possible that the spheres furnished the occupants of the tombs possessed a different function than

Stratum XVII supplies the earliest stone gaming piece; this was of pyramidal shape and measured only 13mm. in height. Fig. 51 was found in Stratum XV, and is an unusual type, in which a piece of white marble was shaped like an animal's knuckle bone. Stratum XIII yielded a disc of gray limestone and an alabaster ovoid, while two marble spheres came from Stratum XII. Also from Stratum XII was a disc of white marble, crudely shaped. This may have originally been a fragment of a vessel. Three discs and two marble spheres were produced by Stratum XI-A in addition to the nine pieces forming the set, already described, found in the child's grave (Locus 181) in this level. No less than twenty-six spheres, ovoids, and discs were scattered throughout the debris of Stratum XI; about half of these were spheres, with ovoids and discs occurring in about equal numbers. Almost all, regardless of shape, were made of alabaster and marble, but a single sphere from Stratum XI was made of terra cotta. One of the discs is shown in Fig. 52, and bears drilled decoration, an unusual feature. Each of the overlying strata of X-A, X, and IX contained stone (usually white or gray marble) discs and spheres, although their numbers are much smaller than in Stratum XI and, in fact, are represented by only two or three specimens from each of those levels. An unillustrated, miniature white marble bobbin was discovered in Stratum X; this measured 18mm. in length and 8mm. in diameter. Whether this object was used as a gaming piece or was amuletic in character is problematical.

K. WEIGHTS (PLATES XCVII.b; CLXXIX, FIG. 54)

Suspension weights, such as loom weights and the like, were extremely rare in the levels and deposits of Gawra covered by this volume. No more than three or four such objects were discovered, all from Strata XI-A and XI. They are usually thick discs with a central suspension hole, or thick rings; basalt or limestone were usually employed. The scarcity of stone loom weights would seem to support the theory

those described above. Most of the tomb spheres, it should be noted, are larger than those discovered in graves or in occupational debris.

advanced in Chapter V, pp. 171-73, that the terra cotta voluted "hut symbols" were, in fact, loom weights, although such negative evidence is not in itself conclusive.

Nor are scale weights much more numerous than those of the loom type. None of the objects described as scale weights in the following paragraphs bore any unit markings of any kind, so that the only criteria which could be employed to determine the function of these stones were their shape, the type of stone used, and their comparative weights. As a consequence, only a few stone objects may be described with any degree of certainty as scale weights. The most outstanding of these is Fig. 54, a black marble "duck-weight," or more accurately, a weight in the form of a crouching animal or bird. From Stratum XV, this object has a flat base, and although it may have been used as a gaming piece, its size, if not its shape, would seem to rule out that possibility. The weight of this specimen is 24 grams which, to judge from other specimens of the same approximate date, was composed of three units of 8 g. each.

The remaining stone objects believed to be scale weights are shown on Plate XCVII.b and are listed in the following table:

TABLE B
(PLATE XCVII.b)

Plate No.	Object No.	Stratum	Weight in Grams
1	33-5-285	IX	66.81
2	G3-106	IX	45.70
3	G7-102	XIII Well	47.45
4	G7-381	XVIII	11.43
5	G3-15	IX	3.56
6	G4-916	XI	30.79
7	33-3-286	X	19.36
8	G4-608	XIII	5.83
9	G6-595	XII	8.71

The small number of specimens, no less than the widely separated strata in which they originated, militates against drawing any strict conclusions from the data which they present. It is obvious, however, that the weight values of these stones do not conform to any single metrological system, for they lack a common denominator. Consequently, it may be (1) that they belong to several systems; (2) that

some of the specimens are not true weights; or (3) that some are aberrant weights. These possibilities will be considered in the following discussion.

Two of the three Stratum IX specimens (Nos. 1 and 2) appear to be related to later weights. No. 1 of Table B although crudely shaped and irregular, has a weight of 66.81 g., which would be equal to eight units of 8.35 g. each. No. 2, a carefully shaped object, with a small, flat, circular base and with sides expanding to a rounded top, weighs 45.70 g., or $5\frac{1}{2}$ units of 8.31 g. each. These figures would approach the weight of the later Babylonian (8.40 g.) and Elamite (8.37 g.) shekels, and would almost exactly correspond to the value of three Gawra Stratum VIII "shekels" of 8.34 g.⁷ The remaining Stratum IX specimen (No. 5) is a rough cylinder, badly chipped, of black obsidian. This variety of stone is unusual in scale weights, and at once raises doubts as to the function of this object. These misgivings are confirmed by the weight of the object, 3.56 g., which even if interpreted as a half-unit, still would not agree with the unit values of any weights from Strata VIII, IX or X. In all probability, therefore, this object is a gaming piece, or possibly an unfinished bead or pendant, rather than a weight.

The only specimen from Stratum X (No. 7) is conical in shape and weighs 19.36 g., which is presumably composed of $2\frac{1}{2}$ units of 7.75 g. each. Such a unit has no place in the weight system of Stratum IX (and VIII) where, as we have seen, a heavier unit was employed; it is, however, related to the weights of earlier levels. No. 6, for example, is from Stratum XI and has a weight of 30.79 g. This figure may be resolved into four units of 7.70 g. each, and can thus be related to our previous specimen. Furthermore, this Stratum XI object has a typical scale-weight shape, which in section is identical with No. 2, although possessing an oval plan. Stratum XII yielded No. 9. This object is cylindrical and is made of dark brown haematite. In both these particulars it satisfies the requirements of scale weights, yet its actual weight is 8.71 g., a value that does not conform to the 7.70—7.75 g. unit found in Strata XI and X, or to the 8.31—8.35 g. unit of Strata IX and VIII. Hence this

⁷ TG., 92 and 93.

example may be considered an aberrant weight, or an illustration of another metrological system, but that it is a weight is unquestionable. Stratum XIII produced two stone objects (Nos. 3 and 8) which are tentatively identified as weights. The first of these comes from the Well in that stratum, and is made of reddish-brown marble. Oval in section, and barrel-shaped in plan, it is almost certainly, if by these standards alone, a scale weight. Its gram value is 47.45, probably formed of six units of 7.93 g. each. The other Stratum XIII specimen (No. 8) is extremely questionable, not only because of its shape (which resembles a celt or pendant more than a weight), but also because of its weight of 5.83 g.—a value that does not agree with that of any of the previous units. The "duck-weight" from Stratum XV (Fig. 54) has already been described. The weight of 24.00 g. of this object is probably composed of three units of 8 g. each, making it the heaviest weight unit discovered in the lower levels of Gawra, although the disparity between it and other units is not excessive. The sole remaining object illustrated on Plate XCVII.b not yet discussed is No. 4, which is the earliest specimen of the group, having been discovered in Stratum XVIII. Like No. 9, it is made of chocolate-brown haematite, but has a unique cubical shape. Its weight is 11.43 g., probably divided into $1\frac{1}{2}$ units of 7.62 g.

The scale weights have now been described. By way of summary, it will be noted that they tend to group themselves into two broad metrological systems, the first of which includes those specimens from Strata XVIII through X, where the apparent range of the weight unit is 7.62—8.00 g. The Stratum IX weights group themselves with those of Stratum VIII in a category having an extremely narrow range of .04 g., from 8.31 to 8.35 g. The evidence thus points to one system having been in use in the extremely long period represented by Strata XVIII through X with, however, No. 9 from Stratum XII suggesting the existence of a rival system. This early system (or systems?) seems to have been superseded in Stratum IX by another, which continued in use throughout Stratum VIII. It cannot be emphasized too strongly, however, that the evidence (particularly that from Strata XVIII through X) on which these general remarks are

based is scanty and inconclusive, and that it is, as a consequence, only tentatively interpreted here.

L. WHETSTONES

(PLATE CLXXIX, FIGS. 55 AND 56)

Fig. 55 shows an object from the Northeast Base of hard gray marble that is grooved on one surface. The ambiguous shape and varying depths of these grooves indicate that it is not a mould, but its exact function is doubtful, although it may have been used to sharpen bone implements, or even as a grater. Fig. 56 illustrates a similar object from Stratum XII with the same markings, which are found on both surfaces of the slab. Of soft sandstone, this specimen bore traces of bitumen on its edges. The grooves of this specimen are as irregular in depth and outline as those on the Northeast Base object described above. Another stone slab found in Stratum XII was similarly grooved.

M. MORTARS

(PLATES XCVII.d; CLXXIX, FIGS. 57-59)

Nine mortars were discovered, of which all but one came from Strata XII through IX. A shallow mortar similar to Fig. 57 (Stratum XIII) was found at the foot of the mound, in the Northeast Base area; this is unillustrated. Fig. 58 shows the only pedestaled mortar, while Fig. 59 and the two specimens illustrated in Plate XCVII.d are typical of the remainder. In addition to these mortars, a long, flat, kneading stone was discovered in Stratum XII; this, like Figs. 58 and 59, was made of basalt.

N. PALETTES

(PLATES XCVII.a, Nos. 1, 6-10; CLXXIX, FIGS. 60-62)

The stratigraphic distribution of painter's palettes follows, in general, the distribution of other types of stone objects. Four palettes were found in the two soundings at the base of the mound, two of which are shown in Figs. 60 and 61. Three specimens came from Strata XX through XVII (Plate XCVII.a, Nos. 6-8); three from Strata XVI and XV (*ibid.*, Nos. 1, 9 and 10); and no less than five from Strata XIII and XII (Fig. 62). Five more palettes were discovered in Stratum XI-A, while a single palette was found in each of Strata XI and

IX. As painting as a means of decorating pottery had already fallen into disfavor in Stratum XI-A, it may be assumed that some of the palettes found in levels overlying XII had been carried over from that stratum.

Throughout their history the Gawra palettes show few typological variations. As a matter of fact, the only change that may be observed is their tendency to become smaller in the later levels, where some specimens are only half the size of their archetypes. Almost all palettes have a low, trough-like shape with open ends and very short side-walls (Figs. 60 and 61), although Fig. 62 shows a simpler variety having no side-walls, and an oval shape. Bases are always flat or slightly concave. The ancient painters must have found them extremely useful utensils, for many show signs of long use, such as depressions worn in their centers. Others still bear traces of paint. Marble and limestone are the usual varieties of stone; a single fine example of a breccia palette (Plate XCVII.a, No. 8) was supplied by Locus 7-68, a grave in Stratum XVIII.

Three small hand or paint mortars were found, one each in Strata XIII, XII, and XI-A. The one from Stratum XII is identical in shape with a specimen from Stratum V,⁸ although slightly larger (60 x 94mm.). The remaining paint mortars were thick, rectangular slabs, with deep depressions worn in their upper surfaces. Although somewhat larger and heavier than the palettes described above, the present objects may have been used for mixing colors, as well as for grinding paint.

O. VESSELS

(PLATES XCV.d; CLXXX-CLXXXI,
FIGS. 63-92)

Ointment or Kohl Vases (Plates XCV.d; CLXXX, Figs. 63-66). All examples of this type of vessel are made of black steatite, and all come from Strata XIII, XII, and XI-A, with Stratum XII yielding four of the total of seven specimens found. These ointment vessels are usually long and four-sided, with a short neck, but a cup-shaped type is illustrated in Fig. 64, while Plate XCV.d, No. 2 shows a fragment of a unique, footed specimen.

⁸ TG., Plate XLIV.a, No. 1.

Another characteristic feature of these tiny vessels is their engraved decoration; only one of the present seven specimens being undecorated (Plate XCV.d, No. 1). A common design is composed of simple, crisscrossed lines (Figs. 63 and 66), but Fig. 64 has a chevron pattern, while Fig. 65 bears a herring-bone or leaf pattern on all four sides. Very significant is the decoration on the ointment vessel fragment shown in Plate XCV.d, No. 2, from Stratum XII. The elements of the engraved design on this vessel are paralleled by the decoration of the bone fragments (from Stratum IX) shown on Plate CLXXXII, Figs. 9 and 10; in the painted decoration of the Stratum XIII beaker illustrated in Plate CXXX, Fig. 204; and in the incised decoration of the incense burner also from Stratum XIII, Plate CXXXII, Fig. 228. The prototype of this unusual design was probably found in the temple architecture of Gawra, as suggested on pp. 34, 144, and 215. Since Stratum XII contained no temples or other buildings possessing the architectural features apparently reproduced on the stone fragment now being discussed, it is extremely likely that this object was actually a product of Stratum XIII, and was carried over into XII where it was found.

Miniature Vessels (Plate CLXXX, Figs. 67-70). These require little comment. The identity in shape of Figs. 67 and 69 is surprising, for the latter is from the Northeast Base, and hence much earlier than Fig. 67, which was found in Stratum XII. Figs. 68 and 69 are also from Stratum XII where, for some reason, stone vessels of the miniature type seem to have been more popular than at any other time. All are made of black steatite or serpentine, except Fig. 70 which is alabaster.

Other Vessels (Plates CLXXX-CLXXXI, Figs. 71-92). The two soundings at the base of the mound, and every layer of the mound from Stratum XIX through Stratum XI (excepting XVI) yielded vessels made of stone, usually in bowl form. They appear to have been most popular in the earliest deposits, with eight specimens having been discovered in Area A and the Northeast Base, and five in Stratum XIX. Strata XVIII through XII each furnished from one to three stone vessels; in Stratum XI-A this number increases to four, and in Stratum XI to five. In strata overlying XI

stone vessels are unknown, only a single isolated example (a cup identical in shape with Fig. 64, although larger and made of alabaster) coming from Stratum IX. The numerous and beautiful stone vessels from the tombs have already been described in Chapter II, where it was observed that these were the products of the inhabitants of Strata X, VIII-C, and VIII-B. Stone vessels, therefore, although absent from the occupational debris of Strata X-A through IX, must have been made in all of those strata; the reasons for their restriction to tombs are discussed in Chapter II (pp. 81-82).

To proceed to specific examples, the earliest stone vessels are shown in Figs. 71-74, from areas at the foot of the mound. Fig. 73, which is made of gray marble, is interesting for its red painted semicircles found on both surfaces of the object. This is the only painted stone vessel yet found at Gawra. Fig. 74 is made of a breccia composed of white fragments in a red matrix; two sets of borings at the rim were made to repair an ancient break. Even more extensive repair was made on Figs. 71 and 72, both from the Northeast Base; the former has five perforations along the line of an old fracture, while the latter has no less than twelve. Of even greater interest than this evidence of economy is the shape of these vessels, which is almost identical with the pottery bowl decorated with a rude, painted rosette illustrated on Plate CXIX, Fig. 72 (Stratum XX). Three additional small stone bowls of similar shape were found in the Northeast Base sounding. Apparently this vessel outline, consisting of a wide, flat base, sharply incurved sides, and a flaring rim, is typical of the Halaf period, for it disappears with the abandonment of Stratum XX.

Figs. 75-78 illustrate the earliest stone vessels found in the stratified deposits of the mound. All these were found in Locus 7-80, an adult burial intrusive into Stratum XIX which was also furnished with the stone palette to be seen on Plate XCVII.a, No. 7. These vessels are characterized by a grooved rim, and all have flat bases. Fig. 76 is unusual in having a pouring lip. Fig. 78 is made of red marble, but the others are shaped from the gray-and-white marble found locally.

Burials again furnish us with the only stone vessels found in Stratum XVIII (Figs. 79-81). Figs. 79

and 80 were discovered in the adult and infant burial, Locus 7-66, and are again characterized by the grooved rims noted on the specimens from Stratum XIX. A new development is the excessively thick and rounded base of Fig. 79. Both are made of light gray marble. Fig. 81 was found in Locus 7-68, and is the earliest stratified vessel having a disc base. The stone is again gray marble, but of a dark shade.

The two stone bowls found in Stratum XVII came from occupational debris, and both possess disc bases, as well as the grooved rims of the earlier examples, Figs. 83 and 84. Gray-and-white marble is again the material.

No stone vessels were discovered in Stratum XVI, but they reappear in Stratum XV. The stone vessels from Strata XV through IX, with but a single exception (Fig. 90), lack the grooved rim typical of all specimens from Strata XIX-XVII. Fig. 85 shows a Stratum XV specimen which was cut from a piece of beautifully veined gray-and-brown marble. That this bowl had been held in high regard is evidenced by the presence of bitumen, which had been employed to mend an ancient fracture. In outline, this specimen is not unlike Figs. 71 and 72, from the Northeast Base, although not so sharply angular.

Stratum XIII yielded only two stone vessels (Figs. 86 and 87) aside from the kohl vase shown in Fig. 63. Fig. 86 was discovered under the floor of the Northern Temple of XIII, and is made of granite. This specimen, as well as Fig. 87, has the now common feature of a disc base, but for the first time illustrates a pot rather than a bowl form, while Figs. 82 and 88 (Stratum XII) supply the first examples of stone jars. The remaining illustrated specimens come from Strata XI-A and XI. Of these, the unusual shape of Fig. 92 is the only noteworthy feature.

P. HUMAN FIGURINES (PLATE XCV.e)

Under this heading are included the two marble objects shown in Plate XCV.e, of which No. 1 was found in Stratum XVIII, and No. 2 in Stratum XIII. The markings on the former seem to indicate a female torso, but the upper part of the object is missing. No. 2 is probably a stylized human figurine,

but a reproduction of an animal's knuckle bone may have been intended, in which case the object may have been used as a gaming piece.

Q. VARIA

(PLATES XCVII.c; CLXXXI, FIGS. 93-96)

The fragment of black steatite shown in Plate XCVII.c was found in the Stratum XIII Well. Flat on both top and bottom, with the top edges notched and the upper surface engraved with regular lines and dots that are apparently not intended as decoration, this may have been a calculating stick of some sort. With Fig. 93 we are again on uncertain ground. This object was found in Stratum XVI, while two similarly drilled fragments were found in Stratum XII. Fig. 93 is made of white marble, and may have been a decorative stud, although such an interpretation of its function is at least doubtful.

The rectangular tablet shown in Fig. 94 bears a crisscrossed engraved decoration on one surface. In size, shape, and type of decoration it resembles a stone tablet found in the trial trench on the slope of the mound.⁹ The present object was discovered in Stratum XIII, next to the Eastern Shrine. Its function, like that of the more elaborately engraved trial-trench specimen, is unknown. Fig. 95 illustrates a stone sling pellet from Stratum XI made of white limestone. It is ovoid in shape, like many sling pellets made of terra cotta, and in all particulars is characteristic of five more, from Strata XI, IX, and unstratified debris. Sling pellets of stone are thus a rarity, compared to those made of clay. Fig. 96, from Stratum XIII, is apparently a fragment of a small moulding, and is made of hard gray limestone.

⁹ *TG.*, Plate XLIII.b, and p. 99.

IX. COPPER OBJECTS

(PLATES XCVIII.a; CLXXXII, FIGS. 1-3)

Objects made of copper are rare in the strata and deposits of Gawra now under review. Stone and bone were far more extensively employed, and continued to be popular long after the first appearance of copper and other metals. As a matter of fact, copper first becomes common only as late as Stratum VI, that stratum thus marking the termination of the transitional period between stone and copper called the Chalcolithic period, as well as the beginning of the true Copper Age.¹

Only three kinds of metals have been found at Gawra in the present deposits, namely gold, electrum, and copper. Both gold and electrum objects (usually in the form of beads and ornaments) have been described in earlier pages (cf. Chapters II and VII), where it was observed that no objects manufactured of these metals have been found in any context earlier than Stratum XII. Copper, however, occurs earlier than other metals, for a single copper awl was discovered in Stratum XIII, with more numerous specimens coming from every succeeding level. In addition, two isolated objects of copper (Plate XCVIII.a, Nos. 5 and 6) were produced by Stratum XVII.

At first glance, the presence of copper in Stratum XVII would seem to indicate that most, if not all, of the Obeid period at Gawra is Chalcolithic in character, and that the Neolithic period ended with the disappearance of pottery of the Halaf type.²

¹ TG., 103-04.

² Contrast Mallowan, *Ar.*, pp. 103-104, who regards the Halaf period as Chalcolithic, basing his opinion on a single small strip of lead from Stratum TT-6 (end of the Halaf period), and a postulated prototype of metal for the pottery type he has designated as the "cream bowl." There is no reason for supposing the "cream bowl" to be other than an original ceramic form. A sharply carinated profile in a pottery vessel is not an infallible indication of an original in some other material, for it may equally as well have been evolved for some utilitarian function; e.g., to afford a narrow waist where the vessel could be held. If, however, a prototype must be sought in some other material, it is much more likely that it will be found in stone, rather than in metal.

However, the fact that the Stratum XVII objects are stratigraphically isolated, with no less than three main levels (XVI, XV, and XIV) and a substratum (XV-A) separating them from the starting point of the continuous history of copper in Stratum XIII immediately throws doubt on such a conclusion. To be sure, there can be little doubt that the Stratum XVII objects were discovered in their original archaeological context, for they were not found together, and no wells or other intrusive media were located near their find-spots.³ Nor were they located near later excavation scarps or dumps, from which they might have detached themselves. Nevertheless, the fact that they are the only specimens of copper to be found before Stratum XIII requires some explanation. Perhaps the Stratum XVII objects were imported from some center of the copper industry nearer to, or located at, the sources of copper ores, at which centers metallurgy may have begun at a somewhat earlier date than at Gawra. Connections with this postulated center of metallurgy may have been broken off in the time of Strata XVI-XIV, or the industry itself may not have been developed sufficiently at its distant source to have continued exports of copper until the time of Stratum XIII. Thus, if this explanation of the anomalous Stratum XVII copper objects is correct, the Chalcolithic Age at Gawra may be regarded as having had its beginning only in Stratum XIII. In any case, our evidence definitely indicates that copper

Nor does the discovery of a single copper bead by the same excavator at Chagar Bazar prove "that the Tell Halaf peoples were well acquainted with metal" (*Iraq*, Vol. III, Part 1, p. 26). On the contrary, because the evidence does consist merely of a single bead, the period should be called Neolithic until more satisfactory proof of the use of metal is forthcoming. A single small bead of copper in a Halafian deposit may have arrived there by any one of a number of accidental causes, particularly in a sounding.

³ The intrusive pit sunk from Stratum XII in Square 4-M is located several metres from the spot where the copper ring (Plate XCVIII.a, No. 5) was found.

was rediscovered as a desirable and useful commodity only as late as XIII, at which time its continuous history at Gawra is begun. That metal was unable to compete seriously with other materials in the strata immediately overlying XIII is shown by the following table listing the stratigraphic distribution of copper objects:

Below Stratum XVII	0
Stratum XVII	2
Strata XVI, XV-A, XV, XIV	0
Stratum XIII	1
Stratum XII	4
Stratum XI-A	5
Stratum XI	9
Stratum X-A	3
Stratum X	2
Stratum IX	3

In all strata listed, copper objects are uncommon, the numerical peak of a mere nine objects being reached in Stratum XI. To these figures, however, are to be added the copper objects found in graves and tombs, such as a few copper beads, the copper pendant from Tomb G36-135 (contemporaneous with Stratum XI) shown on Plate CVII, Fig. 51; and the nine copper bosses or buttons illustrated by Fig. 1 of Plate CLXXXII. The latter were found in an urn burial of an adult in Stratum XII, but as this burial occurred on the slope of the mound, its exact stratigraphic source is doubtful, although perhaps of Stratum XI-A date. These scattered items, while increasing the numbers in the above table, are nevertheless too few to alter radically the distributional picture of copper in Strata XIII through IX. Even in the previously excavated Stratum VIII the total number of copper objects discovered was only twenty-two; in Stratum VII this number increased to forty-two, while the all-time peak was reached in Stratum VI, where three hundred and thirty-four copper specimens were discovered.⁴ This survey of the occurrence of copper in all strata thus shows this variety of metal to be rare in Strata XIII through IX, but becoming progressively more common in succeeding strata until Stratum VI is reached, when the true Copper Age is begun.

Two copper specimens, both adzes, from Strata XII and XI, were subjected to chemical analysis

to determine their constituent elements, with the following results:⁵

	<i>Adze, Stratum XII</i> (G4-1167 = 35-10-246)	<i>Adze, Stratum XI</i> (G4-984 = 35-10-101a)
Copper	95.36%	91.80%
Tin .....	...	...
Lead .....	...	...
Iron .....	.19	.02
Nickel .....	...	3.49
Arsenic .....	.05	1.63
Undetermined	4.40	3.06

Thus the two specimens differ sharply in their composition, with the Stratum XII adze containing a considerably higher percentage of copper than its counterpart from XI. This difference is more than accounted for by the high nickel and arsenic content of the later specimen, the only other divergence being a difference in the amount of iron contained by each. Despite these constituent differences, both specimens agree in one important particular. This is the total absence of tin, which proves them to be true copper objects, and not bronze.

It is of some interest to compare these analyses of Strata XII and XI objects with those from Strata VIII and VI published in Volume I.⁶ Both later specimens contained appreciable amounts of tin, particularly that from Stratum VIII, where 5.62% of the object was formed of that metal. Small amounts of lead also were present in those later objects, an element missing from the earlier specimens now under consideration. These basic differences between Strata VIII and VI copper objects on the one hand, and Strata XII and XI objects on the other, suggests that these pairs of strata obtained their ores from different sources. Even more noteworthy, however, are the differences between the Stratum XII object and that from Stratum XI, which point even more strongly to the same conclusion. The lack of uniformity in the composition of all these copper implements from four different strata thus suggests extensive trade connections, for in every case a different regional source seems to be indicated. However, until more deposits of copper

⁵ The analyst was Mr. A. J. Gausch of Smith, Rudy and Company, Philadelphia, Pa.

⁶ P. 102.

⁴ TG., 103.

ores in neighboring regions have been located and analyzed, and their characteristics determined, it would be foolhardy to accept such a conclusion at face value, for the true explanation may lie in differences in smelting techniques or in some other technical peculiarity.

Turning now to a description of the individual copper objects, the specimens from Stratum XVII consist of a small ring, and a chisel, rectangular in section (Plate XCVIII.a, Nos. 5 and 6). The sole copper artifact discovered in Stratum XIII was an implement, possibly an awl, measuring 109mm. in length and 5mm. in thickness; this is unillustrated. Stratum XII copper objects are shown on Plate CLXXXII, Fig. 1 and Plate XCVIII.a, No. 2. The former illustrates nine buttons, hemispherical in section, with slight projections on opposite sides which are pierced through. In the interior of these objects were traces of thread connecting the openings, by means of which they had been attached to some article of clothing. The remaining Stratum XII copper specimen is an axe-head with a wide, rounded, cutting-edge. This feature is duplicated on the specimen shown as No. 1 of the same plate

(XCVIII.a) from Stratum XI, and is also found on another axe-head from Stratum XIII which is not illustrated. Fig. 3 shows an adze from Stratum XI; the same level yielded the pin illustrated in Plate XCVIII.a, No. 3. No. 4, a bent pin with looped head, is unstratified.

The copper object shown on Plate CLXXXII, Fig. 2, is the most interesting. Apparently formed by casting, it is not altogether unlike the mouthpiece of a musical instrument, and resembles the tubular bone objects shown in Figs. 7-10 of the same plate. The present specimen is hollow and has the bell-shaped top characteristic of its bone analogues, although having a conical rather than tubular shape. It was found under a wall of the Stratum XI Temple.

Unillustrated objects of doubtful stratigraphic source include a copper nail with convex head, discovered on the slope of the mound, and a pair of tweezers, found in unstratified débris. Identical tweezers were produced by Strata VII-V,⁷ and one of these levels may have been the original source of the present specimen.

⁷ TG., 111, Plate L, No. 3.

X. BONE OBJECTS

(PLATES XCVIII.b, XCIX; CLXXXII, FIGS. 4-15)

Animal bones, chiefly those of sheep and other domestic animals, provided a material that was easily cut or otherwise fashioned into objects having a variety of uses, and such worked bones are common in all Gawra deposits covered by this account. Four main classes of bone objects may be distinguished, of which by far the largest group is composed of:

A. TOOLS AND IMPLEMENTS

(PLATES XCVIII.b, XCIX.a, XCIX.c, No. 1; CLXXXII, FIG. 4)

Awls (Plates XCVIII.b, Nos. 1-4; XCIX.a and b, No. 1). The most common type of bone implement is the awl, which was formed simply by pointing one end of an animal's leg bone, retaining the jointed end to serve as the butt of the tool. These implements are commonly described as awls, which may describe their principal use; however, they must have served a variety of purposes in addition to that of punching holes in hides and other materials. Plates XCVIII.b, Nos. 1-4, and XCIX.a illustrate these implements; in addition, Plate XCIX.c, No. 1, shows a hafted specimen, the butt being formed of baked clay. Bitumen was sometimes employed for the same purpose; cf. Plate XCVIII.b, No. 5. Almost all awls, as well as other types of bone implements, bear a high gloss which is presumably the result of long use.

Spatulas and Scraper (Plate XCVIII.b, No. 5). These are not as common as awls, but occur frequently in all strata. All specimens recovered were incomplete, as most of them were thin and were therefore easily broken. The ends of these implements are sometimes merely rounded, but often have a wider, circular termination, and resemble a spoon in outline, although having flat surfaces.

Scrapers are represented by a single example (Plate XCVIII.b, No. 5), which bears the remains of a bitumen handle. This type of bone tool may have been used in the manufacture of pottery, and perhaps, like the awls and scrapers, may have been used as cooking and eating utensils.

Adze (Plate CLXXXII, Fig. 4). The only bone specimen of this type of tool was found in Area A, and is bored for hafting (Fig. 4). The butt end is incomplete. Apparently this implement was intended for use on some soft kind of wood, for the nature of its material would have otherwise restricted too severely its usefulness.

B. TUBES

(PLATE CLXXXII, FIGS. 6-10)

Five bone tubes were found, one each in Strata XII and XI-A, two in Stratum XI, and one in Stratum IX. All possess the same general shape, although Figs. 9 and 10 (two fragments of a single object) illustrate a square, rather than a tubular shape, and although Fig. 6 lacks the small, bell-shaped tip characteristic of the other specimens. Possibly the latter example was merely a decorative ferrule, but a different explanation must be sought for the other objects of this group, which have a more specialized form, suggesting that they had been used as mouthpieces of some sort, perhaps of a reed musical instrument.

In the immediately following section, bone playing-pipes will be described which have been discovered in various levels from Stratum XVII through XII. If the present group of bone objects are indeed mouthpieces of a reed pipe,¹ it would be surprising to find two varieties of the same kind of musical instrument side by side. It is interesting to observe, therefore, that the playing-pipes are not found in strata later than XII, while the mouthpieces first appear in that stratum, and continue to occur in overlying levels through Stratum IX. In other words, the mouthpieces represent a development from the playing-pipes, and quite obviously were an improvement over the earlier type, for once the mouthpiece type of instrument had evolved, the playing-pipes were discontinued. Both the size and tubular shape of these objects would accommodate the insertion of a reed, and in this connection it is

¹ Similar to the modern Arab's *mizajij* which, however, is a double-reed instrument.

also of interest to note that the interior of Figs. 9 and 10 was left tubular, although the exterior was cut square.

The latter object brings to attention the incised decoration to be found on all these tubes, with the exception of Fig. 8. The decoration of Fig. 7 has no special significance, for it seems to have been cut not so much with a decorative intent as to provide the player with a ribbed surface where he might grip the instrument. With Figs. 9 and 10, from Stratum IX, it is the possible prototype of the decoration that is of greatest importance, for the elements of the design on this bone object are duplicated in the painted decoration of the beaker, Plate CXXX, Fig. 204, and the incised decoration of the incense burner, Plate CXXXII, Fig. 228, both from Stratum XIII, as well as in the engraved decoration of the fragment of the footed ointment vessel from Stratum XII shown on Plate XCV.d, No. 2.

If the theory is correct that the beaker, incense burner, and stone ointment vessel derived their patterns from certain architectural features of the temples of Stratum XIII, as suggested in Chapter IV, then the bone fragments under discussion must have had a similar architectural model in Stratum IX, for it would be too much to suppose that they, too, recall the considerably earlier Stratum XIII Temples. It is, consequently, significant that the Stratum IX Temple was featured by recessed walls, precisely as in Stratum XIII. Therefore, the triangles surmounting these recesses on the bone fragments must symbolize windows or a pediment of the same shape, which must have existed on both the Stratum IX and the Stratum XIII Temples.

C. PLAYING-PIPES OR FLUTES

(PLATES XCIX.b, c, No. 2, d; CLXXXII,
FIGS. 11-15)

These are perhaps the oldest musical instruments yet discovered, for our earliest specimen (Plate XCIX.b, No. 1) was found in Stratum XVII. Stratum XVI yielded two examples, and Stratum XV one, while three were found in Stratum XII. One of the two unbroken specimens (Plate XCIX.d, No. 3=Fig. 15) was discovered in an urn burial

in Stratum XII (Locus G36-171), and lay under the head of the skeleton, that of a child less than ten years of age.

All these instruments were fashioned from the leg bones of animals; some of the bones possess a thin dividing wall which thus forms a double tube, but whether this was required for their proper use is doubtful. In each of the unbroken specimens one end of the bone has a natural bifurcation, the other end terminating in a thicker joint which was placed to the mouth (Plate XCIX.b, No. 1, and XCIX.d, No. 3). It is probably not coincidental that the three earliest specimens (Plate XCIX.b, Nos. 1 and 2, and Fig. 11) have no holes bored into their upper surfaces, and thus may have been simple pipes or whistles, while the later specimens all have stops or holes, and are therefore to be described as flutes. Furthermore, it should be noted that two of the three earliest specimens have no dividing wall within the bone. The complete specimen shown in Fig. 15 (=Plate XCIX.d, No. 3) has a small hole in both the top and bottom surfaces near the bifurcated end, which is otherwise closed. The same object has four holes or stops bored into it, two on top and two adjoining these on the sides. Fig. 12, on the other hand, although it is incomplete, has six stops, while the complete Stratum XVII specimen (Plate XCIX.b, No. 1) may be unfinished or may have been a simple pipe or whistle, since it possesses no stops at all. The number of holes originally found on the remaining examples is indeterminate, since all are incomplete. All bear incised chevrons on the flat lower surface to afford a grip for the thumbs.

D. INLAY

(PLATE CLXXXII, FIG. 5)

A fragment of a bone object is shown in Fig. 5; this possesses a pair of inlay holes at its top, and three at the line of the break. Its exact function is doubtful, although to judge by its flat surfaces, size, and thickness, it may have been an inlay of some kind. Most interesting is the fact that it is identical with a complete bone object from Stratum VIII-A in size, material, shape, and details,² although the present specimen was found in Stratum IX.

² TG., Plate LIIa, and p. 117.

XI. REPORT ON A SKULL FROM THE WELL IN AREA A

BY DR. WILTON MARION KROGMAN, ASSOCIATE PROFESSOR OF ANATOMY AND PHYSICAL ANTHROPOLOGY, UNIVERSITY OF CHICAGO, ILLINOIS, AND DR. WILLIAM HENRY SASSAMAN, CURATOR OF THE HAMANN MUSEUM OF ANATOMY AND COMPARATIVE ANTHROPOLOGY, WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO.

(PLATES C-CII)

Foreword

This skull was sent to us in 1938 when both authors were on the staff of the Anatomical Laboratory, Western Reserve University.

The skull was found upon unpacking to be badly damaged. The excellent restoration is the work of W. H. Sassaman. The skull was described and measured and the report was written by W. M. Krogman. The authors have checked with one another as to the accuracy of the restoration, and as to the validity of interpretations and conclusions drawn from a study of the skull.

W. M. KROGMAN

W. H. SASSAMAN

The Age of the Tepe Gawra Skull

In his report on the Assyrian Expedition, Speiser (1937) mentions level "f" as "the lowest stratum" in the area adjoining the Tepe Gawra Mound. This lowest occupational level was 27.32m. "below the former top of the mound." Level "f," however, does not represent the earliest settlement at Tepe Gawra proper. A. J. Tobler, associated with Prof. Speiser, writes as follows (letter to W. M. K., 8-29-43):

During the sixth campaign at Tepe Gawra in the years 1936-7, Dr. Speiser decided that in order to furnish safe dumping areas it would be necessary to excavate selected sections at the foot of the mound down to virgin soil. Two such sections were chosen, one of which was on the southeastern foot of the mound, and was called Area A. The excavation of this area yielded a large amount of pottery and other objects of the Tell Halaf period, but no building remains were encountered, a fact that indicates this

portion of the base of the mound had been used as a dumping ground by the inhabitants of Gawra in Halaf times. There were, consequently, no clearly marked lines of stratification within Area A, but six roughly separated levels of deposits were observed, which were designated by the letters A to F, of which A was the uppermost. Seventy-five centimetres under Level F, in the east corner of Area A and sunk into virgin soil, the mouth of a well or cistern was uncovered. This well eventually proved to be roughly bottle-shaped, with an oval mouth 150x120cm. and having a depth of exactly five metres.

At some time in its history this well had outlived its usefulness and came to be used as a burial pit. Altogether twenty-four persons were buried within it, in four successive layers. These four burials contained (from bottom to top) one, nine, twelve, and two persons respectively. The lowest burial, that of a single adult, occurred 1.30m. above the floor of the well; the topmost was 2m. below the mouth of the well. The skull now being studied by you was found in the mass burial containing twelve persons. The remaining skulls and other skeletal material were too damaged or too fragile to remove for study. Apparently all were adults, but no further information could be obtained.

All the interments were made without regard to orientation or the position of the bodies, and many skeletons had their bones intermingled. As a further indication that these were not formal burials, most of the skeletons lay directly under the mouth of the pit, as if the bodies had been cast down the shaft. A few pottery vessels and stone objects were found broken and scattered with the bones, as well as over and below them. These seem to have been thrown in with the filling of the well, and were probably not intended as burial furnishings. These objects, however, particularly the pottery vessels, provide us with valuable material for dating, and represent the earliest specimens yet recovered at Tepe Gawra. The painted designs on the vessels, while showing some relationship to those appearing on the Halaf pottery recovered in the various levels

of Area A overlying the well, nevertheless represent a much earlier stage. Whether this stage is to be assigned to a very early phase of the Halaf period, or whether it is indeed pre-Halafian cannot now be stated with any degree of certainty.

This letter is a pretty clear statement of the time element involved. Certainly it must satisfy the stay-at-home physical anthropologist, who has to rely upon the archaeologist—and the vagaries of potsherds—for a reasonably precise dating.

There was another problem that bothered us, however, viz., the relatively excellent state of preservation of this skull, which was the only one recoverable for careful study. The question of an intrusive burial was raised by us, as a possible explanation pointing to a much later date for the one skull. To this query Mr. Tobler replied as follows (letter to W. M. K., 9-6-43):

I cannot advance any satisfactory explanation for the excellent preservation of the skull from the Area A Well. I am certain, however, that it is not a much later intrusion, for the photograph shows that it is associated too closely with other skeletons in this burial to have been an intrusive accident. Furthermore, the upper burial of two individuals would then have to be interpreted as a later intrusion as well, for that burial lay directly over the skull in question. The final argument against regarding this skull as later is that no disturbance was noted in the deposits overlying the mouth of the Well. Somewhat relevant to this question, even if it does not give us the answer, is the fact that sherds found on or near the bottom of the Well were soft and patinated, presumably from long submersion in water. If the burials had been made in mud or a damp fill it may account for the fact that it was possible to recover only two skulls and no other bones from all of the burials. Of these two skulls, one is now being studied by you; the other was discarded at the expedition house, having crumbled while being treated. Both came from what was designated as Burial B, consisting of a mass burial of 12 persons immediately overlying nine others.

It appears from the accompanying photographs that a decision of burial *in situ* is warranted. Plate C.a shows the two individuals of Burial A *above* Burial B, consisting of twelve individuals. The skull being studied is from Burial B, *below* an undisturbed double burial. In Plate C.b the Tepe Gawra skull is shown *in situ* in the mass burial: it is just a bit above center.

We may accept the Tepe Gawra skull as being of considerable antiquity. For purposes of a comparative morphological study it will suffice to consider ca. 4000-4500 B.C. as its age.

Description of the Tepe Gawra Skull

The skull is that of an adult female, about twenty-five years of age. Mid-face is badly damaged, involving the orbito-nasal area, including also the ethmo-vomero-sphenoid complex. Both zygomatic arches are incomplete. This damage has necessitated a rebuilding and re-hafting of facial skeleton to vault. The fragmentary nature of the damage is clearly shown in Plate CI. The restoration, as well as the general morphology of the skull, is shown in Plate CII.

The vault shows only slight muscularity (i.e., development of lines of muscle attachment). In form it is sphenoid. The forehead shows small supra-orbital ridges, a small glabella, a slight slope, a slight postorbital constriction, small frontal bosses, medium breadth, and no metopism. The temporal region shows a bilateral pterion H, and there is medium temporal fullness. The mastoids are small, and there is a medium supramastoid crest. The parietal area shows no sagittal elevation, no post-coronal depression, and medium bosses. There are no parietal foramina. The occiput has a slight curve and is broad;inion and a torus are both absent; there is slight flattening; there is no *os apicis*, no *os Inca*, and a few small, bilateral Wormian bones. The coronal and sagittal sutures show medium serration; the lambdoid suture is pronouncedly serrated. Basion-porion height is medium. The occipital condyles are small, and styloid processes are absent. There is no pharyngeal fossa and the pharyngeal tubercle is small. Glenoid (mandibular) fossa depth is medium, and postglenoidal processes are small. The tympanic plate is thin, the petrous depression is slight. Palate is paraboloid and of medium vaulting. There is no torus palatinus. The transverse palatine suture is straight, in a transverse direction.

The face cannot be described in detail due to damage. Size in general is medium; orbits are rhomboid, with only a small lateral-and-downward inclination. There is no infra-orbital suture, right or left; suborbital fossae are medium, as is also the

infra-maxillary notch. There is no *os japonicum*, right and left. The zygomatic arches are of medium size, with moderate lateral projection and slight anterior projection. There are small marginal processes. In the nasal area we can mention only dull nasal sills and a small anterior nasal spine. There is moderate facial prognathism.

The mandible* is small with a well-marked median symphyseal ridge and a medium chin development. Spinae mentales are medium and there are no mandibular tori. There is no gonial angle eversion.

Tooth eruption has been completed, but a number of teeth have been lost, as follows:

Palatal arch

right: I1-2, M3*

left: I1-2, C, M3*

Mandibular arch

right: C, Pre 1, M2*, M3*

left: M2*, M3*

As closely as can be ascertained those marked with an asterisk (*) were lost ante-mortem, the others post-mortem.

There were no shovel-shaped incisors. The occlusion shows a slight over-bite. There was no tooth crowding and no malpositioned or rotated teeth. The molars show a typical plus-four cusp pattern.

In Table 1 the essential cranial measurements and indices are given, and in Table 2 those facial measurements and indices possible to ascertain are given. (A query (?) denotes uncertainty due to damage.)

In its morphology and in its morphometry the skull is typically that of a female Mediterranean: the skull is moderately long, *mesocranic*, and moderately high-vaulted, *orthoeranic*; it is moderately broad, *metriocranic*, with a relatively broad forehead, *eurymetopic*; the entire face is moderately broad, *mesoprosopic*, while the nasal aperture is broad, *chamaerrhinic*.

Comparative Study of the Tepe Gawra Skull

In Table 3 are presented in brief tabular form certain dimensions of other female Mediterranean

* For purposes of stability in restoration the mandible was ankylosed (by a celluloid adhesive) to the mandibular fossae and to the palatal arch. It was not, therefore, studied osteometrically in this report.

TABLE 1

Cranial Measurements and Indices

Measurements (in mm.)

Max. length	169.5
Max. breadth	131.5
Min. frontal breadth	91.0
Asterionic breadth	97.5
Basio-bregmatic height	122.0
Auricular height (right side)	105.0
Basio-nasion length	86.0?
Horizontal circumference	477.0
Transverse arc	292.0
Sagittal arc	350.0?
Frontal arc	125.0?
Parietal arc	118.0
Occipital arc	107.0
Foramen magnum length	35.0
Foramen magnum breadth	27.5
Cranial module $\frac{L+B+H}{3}$	137.7

Cranial capacity Lee and Pearson ♀ c 1174.04 cc.

Indices:

Breadth-length	77.5
Height-length	72.5
Height-breadth	92.8
Auric. height-length	61.9
Fronto-parietal	69.2
Foraminal	78.5

TABLE 2

Facial Measurements and Indices

Measurements (in mm.)

Bi-zygomatic breadth	112.0?
Midfacial breadth	89.0
Total facial height	99.0?
Bi-orbital breadth	93.0
Nasal height	44.0
Nasal breadth	24.0
Orbital height	32.0

Indices

Total facial	88.4?
Total midfacial	111.2?
Zygo-frontal	81.2
Nasal	54.5

crania roughly contemporaneous with the Tepe Gawra skull. The data are taken from reports by Buxton and Rice (1931), Sewell and Guha (1929-1931), Krogman and Alishar (1937), on Tepe Hissar (1940), and by Krogman and Sassaman on Chanhudaro (1943). All series are of single crania, save Mohenjodaro, which has four (Nos. 7, 10, 19, 26) and Tepe Hissar II which has seven. Alishar Chalcolithic is 3500-3000 B.C., Sialkot is

TABLE 3
COMPARATIVE STUDY OF THE TEPE GAWRA SKULL

Dimension	Tepe Gawra	Alishar Chalcolithic	Sialkot	Chanhu- Daro	Mohenjo- Daro	Kish "A"	Tepe Hissar II
Max. cran. L	169.5	179.0	—	178.0	180.2	176.0	178.3
Max. cran. B	131.5	130.0	—	126.5	118.3	124.0	132.1
Ba-br H	122.0	—	—	123.0	136.0	142.0	129.9
B/L	77.5	72.6	71.1	71.1	63.5	70.5	74.1
H/L	72.5	—	77.8	69.1	75.7	80.7	72.9
Total face H	99.0?	—	—	—	—	—	111.4
Upper face H	—	66.0	—	61.0	—	62.0	67.6
Face B	112.0?	124.0	—	124.0	94.0	110.0	116.2
Total fac. ind.	88.4?	—	—	—	—	—	92.7
Upper fac. ind.	—	53.2	—	49.0	—	56.4	56.4
Orbital B	—	38.0	—	43.0	38.3	37.0	38.7
Orbital H	32.0	35.0	—	32.5	32.9	34.4	30.7
Orbital Index	—	92.1	—	75.6	87.9	91.9	79.3
Nasal H	44.0	46.0	—	48.5	46.1	49.5	48.3
Nasal B	24.0	22.0	—	25.0	21.1	30.5	23.7
Nasal index	54.5	47.8	—	51.6	48.0	61.6	49.1

"Indian Chalcolithic," (?) ca. 3000 B.C., Chanhu-daro is 3000-2600 B.C., Mohenjo-daro is 3250-2750 B.C., Kish "A" is 2900-2800 B.C., and Tepe Hissar II is 3500-3000 B.C.

In its absolute cranial dimensions the Tepe Gawra skull is quite small. Maximum cranial length and basio-bregmatic height are reduced, while maximum cranial breadth is average or a bit over, especially compared to the very narrow Mohenjo-daro crania. As a reflection of reduced length and of average breadth the Tepe Gawra skull is *mesocranic*, while all others are *dolichocranic*, the Mohenjo-daro crania markedly so. The Tepe Gawra skull is *orthocranic*, as are also the Tepe Hissar II crania; Sialkot, Mohenjo-daro, and Kish "A" are *hypsicranic*, while Chanhu-daro is *chamaecranic*. The Tepe Gawra face is also small in its absolute dimensions: with respect to the total facial index it is *mesoprosopic*, the Tepe Hissar II are *leptoprosopic*; no comparison can be made with reference to the upper facial index. No comparison is possible in the orbital index. In the nasal index Tepe Gawra is *chamaerhine*, as are also Chanhu-daro and Kish "A"; Alishar Chalcolithic, Mohenjo-daro, and Tepe Hissar II are *mesorrhine*.

It is a difficult task—and rather a disheartening one—to fit a single skull into a racial picture in space and in time. The problem of individual variation is a difficult one, to begin with; add to this the fact

that dimensions give size and an idea of proportion, but no real concept of morphological ensemble. Then doubt and uncertainty, mixed with caution, well-nigh circumvent even an attempt at a guess, much less a statement of racial affinity. Yet we stand by our earlier assessment, for one of us (Krogman, 1944) in an unpublished report, has had occasion to analyze the entire protohistoric racial history of the vast region from the circum-Mediterranean area in the West to the Irano-Indus area in the East. The ascription of the Tepe Gawra skull the Mediterranean type does not do violence to the basic racial picture of the protohistoric times of the region above mentioned; there is expression of a fundamental morphological pattern, if not adherence to precise morphometric detail.

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CATALOGUE OF THE ILLUSTRATED SPECIMENS

The following catalogue lists all objects illustrated in this book. It specifies type, material, decoration (if any), dimensions, field number, stratum, and square, room, or locus, and present location. In regard to the latter, Baghdad refers to the Iraq Museum, while the accession numbers are specified of those objects in the University Museum. No. refers to photographed specimens and Fig. to drawn examples. As regards dimensions, l. = length, h. = height, w. = width, d. = diameter, and t. = thickness; the figures which follow always indicate millimetres. Ex. before any one of these abbreviations denotes existing length, etc. The maximum measurements are always the ones listed. Whenever an object has been illustrated more than once, the cross-reference is given at the end of the description.

Catalogue

PLATE LII

- b. 1. "Hut symbol," gray marble; h. 96, d. 60. G3-293. Tomb 31. Baghdad. (=Plate CIV, Fig. 23.)
2. "Hut symbol," gray marble; h. 98, d. 60. G3-294. Tomb 31. 33-3-141.
- c. Jar fragment, gray and white marble. G3-425. Tomb 45. 33-3-214.

PLATE LIII

- a. Handled bowl, serpentine; h. 30, body d. 43, overall d. 80. G3-285. Tomb 31. Baghdad. (=Plate CIV, Fig. 19.)
- b. Spouted jar, obsidian; h. 100, d. 116. G4-634. Tomb 102. Baghdad. (=Plate CIII, Fig. 8.)
- c. Spouted bowl, obsidian; h. 68, d. 126. G4-635. Tomb 102. 35-10-287. (=Plate CIII, Fig. 7.)
- d. Pot, oolitic limestone; h. 48, d. 106. G4-737. Tomb 109. 35-10-295. (=Plate CIII, Fig. 9.)
- e. Beaker, serpentine; h. 79, d. 88. G4-773. Tomb 110. 35-10-315. (=Plate CIV, Fig. 13.)
- f. Jar, black and white marble; h. 63, d. 60. G4-736. Tomb 109. Baghdad. (=Plate CIII, Fig. 12.)

PLATE LIV

- a. 1. Comb, ivory; l. 210. G3-296. Tomb 31. Baghdad.
2. Comb, bone; l. 156, w. 20. G3-295. Tomb 31. Baghdad.
- b. Comb, ivory, ex. l. 196, w. 41. G3-380. Tomb 34. 33-3-189. (=Plate CV, Fig. 27.)

- c. 1. Comb, ivory, l. 128, w. 22, t. 3. G3-151. Tomb 24. 33-3-71. (=Plate CV, Fig. 28.)
2. Hair-pin, ivory, lapis lazuli and turquoise inlay, four gold bands; l. 200, d. 10. G3-152. Tomb 24. Baghdad. (=Plate CV, Fig. 29.)

PLATE LV

- a. 1. String of beads, gold and carnelian; l. 305. G4-774B. Tomb 110. 35-10-318.
2. String of beads, gold and electrum. G4-751. Tomb 109. Baghdad.
3. String of beads, gold and electrum. G4-751. Tomb 109. 35-10-301.
4. String of beads; gold, carnelian, lapis lazuli. G4-774. Tomb 110. 35-10-318.
- b. 1. String of beads, white paste, shell, black stone. G5-1298A. Tomb 209. 36-6-359.
2. String of beads, white paste. G5-1298B. Tomb 209. Baghdad.
3. String of beads, cowries. G5-1298C. Tomb 209. Baghdad.

PLATE LVI

- a. 1, 2, 4-8. Beads, turquoise, shell, lapis lazuli, quartz, carnelian, gold. G3-282. Tomb 31. 33-3-137.
3. String of beads, turquoise, shell, lapis lazuli, quartz, carnelian, gold. G3-290. Tomb 31. Baghdad.
- b. String of beads, gold, carnelian, turquoise. G4-794B. Tomb 111. Baghdad.
- c. 1. Beads, lapis lazuli; l. 10. G3-432. Tomb C. 33-3-219.
2. Bead, lapis lazuli; w. 12. G3-432. Tomb C. 33-3-219.
3. Pendant, lapis lazuli; h. 19. G3-432. Tomb C. 33-3-219.

PLATE LVII

- a. 1. String of beads, shell, white stone, carnelian, obsidian; l. 635. G3-91. Tomb 14. 35-3-44.
2. String of beads, carnelian and white shell; l. 380. G4-638A. Tomb 102. 35-10-288.
3. String of beads (670), white paste and carnelian. G6-147. Tomb G36-27. 37-16-49.
4. String of beads, white paste and carnelian; l. 4420. G5-1504. Tomb 226. 36-6-364.
5. String of cowries; l. 3260. G6-148B. Tomb G36-27. 37-16-49.

6. String of beads, white paste, carnelian, lapis lazuli; l. 1140. G5-1440. Tomb 180. 36-6-350.
- b. String of beads, white paste, obsidian, cowries, black steatite; l. 6550. G6-330A. Tomb G36-60. Baghdad.

PLATE LVIII

- a. 1. Ribbon-rosette, gold; ex. l. 59, d. 40. G4-767. Tomb 110. Baghdad.
2. Rosette, gold; d. 84. G4-739. Tomb 109. Baghdad.
3. Ribbon-rosette, gold; l. 60, d. 36. G7-741. Tomb 109. 35-10-306. (=Plate CVII, Fig. 53.)
- b. 1. Rosette, gold; d. 26. G4-742. Tomb 109. Baghdad.
2. Rosette, gold; d. 27. G4-742. Tomb 109. 35-10-307.
3. Rosette, gold; d. 70. G4-766A. Tomb 110. Baghdad.
4. Rosette, gold, turquoise center; d. 67. G4-766B. Tomb 110. 35-10-320B. (=Plate CVIII, Fig. 58.)
5. Rosette, gold, lapis lazuli center; d. 73. G4-830. Tomb 114. Baghdad. (=Plate CVII, Fig. 55.)

PLATE LIX

- a. 1. Stud, gold; l. 31, w. 18. G4-746. Tomb 109. Baghdad. (=Plate CVIII, Fig. 59.)
2. Stud, gold; l. 14, w. 9. G4-749. Tomb 109. 35-10-310.
3. Stud, gold; l. 31, w. 18. G4-746. Tomb 109. Baghdad.
4. Stud, gold, lapis lazuli inlay; l. 13, w. 9. G4-749. Tomb 109. Baghdad.
5. Stud, gold; l. 31, w. 18. G4-746. Tomb 109. Baghdad.
6. Rosette, gold; d. 19. G4-765. Tomb 110. Baghdad. (=Plate CVII, Fig. 56.)
7. Rosette, gold; d. 18. G4-765. Tomb 110. 35-10-319.
8. Rosette, gold; d. 18. G4-765. Tomb 110. Baghdad.
9. Rosette, gold; d. 16. G4-743. Tomb 109. 35-10-308.
10. Tube, gold; l. 77, d. 13. G4-747. Tomb 109. Baghdad. (=Plate CVIII, Fig. 64.)
- b. Wolf's head, electrum; l. 30, h. 23. G4-821. Tomb 114. Baghdad. (=Plate CVIII, Fig. 65.)
- c. Seal, rectangular plaque; ivory; l. 45, w. 36, t. 9. G3-289. Tomb 31. 33-3-140. (=Plate CVI, Fig. 39.)

PLATE LXVII

- a. Painted sherds from Area A, Level E.
- b. Painted sherds from Area A, Level F.

PLATE LXVIII

- a. Painted sherds from Stratum XX.
- b. Painted sherds from Stratum XX.

PLATE LXIX

- a. Painted sherds from Stratum XIX.
- b. Painted sherds from Stratum XIX.

PLATE LXX

- a. Painted sherds from Stratum XIX.
- b. Painted sherds from Stratum XVIII.

PLATE LXXI

- a. Painted sherds from Stratum XVIII.
- b. Painted sherds from Stratum XVIII.

PLATE LXXII

- a. 1. Bowl, brown ware, faded dark red paint; h. 65, d. 105. G7-425. XVIII, 3G, Locus 7-72, grave. 38-13-769.
2. Bowl, fine light brown ware, dark brown paint; h. 68, d. 128. G7-449. XIX, 4G. Baghdad.
3. Bowl, tan ware, dark brown paint; h. 65, d. 88. G7-376. XVIII, 3J. Baghdad.
4. Jar, coarse light greenish ware, dark brown paint; h. 114, d. 86. G7-452. XIX, 4G, Locus 7-80, grave. Baghdad.
5. Jar, hard buff ware, red paint; h. 90, d. 72. G7-439. XIX, 4K. 38-13-531.
6. Jar, brown ware, traces of dark brown paint; h. 80, d. 64. G7-359. XIX, 5K. Baghdad.
7. Jar, coarse light gray-green ware; h. 104, d. 98. G7-434. Below XVIII, 4J, Locus 7-76, grave. Baghdad.
- b. Jar, well-baked light green ware, bistre paint; h. 230, d. 200. G7-379. XVIII, 4J, Locus 7-59, grave. 38-13-758.
- c. Jar, light green ware, bistre paint; h. 220, d. 190. G7-365. XVIII, 3J, Locus 7-58, grave. 38-13-754.

PLATE LXXIII

- a. Bowl, light brown ware, dark brown paint; h. 100, d. 150. G7-347. XVIII, 3J. Baghdad.
- b. Lenticular jar, spout missing, reddish-brown ware, few white grits, cream slip on exterior, bistre paint; ex. h. 82, d. 240. G7-344. XVIII, 4J. 38-13-534.
- c. 1. Jar, light gray-green ware, dark brown paint; h. 95, d. 72. G7-400. XVIII, 4G, Locus 7-70, grave. Baghdad.
2. Jar, light gray-green ware, dark red paint; h. 124, d. 94. G7-361. XVIII, 3J, Locus 7-62, grave. 38-13-762.

- d. Bowl, light brown ware, dark brown paint; h. 112, d. 254. G7-408. XVIII, 4G, Locus 7-70, grave, Baghdad. (=Plate CXXI, Fig. 89.)
- e. 1. Scoop, light brown ware, rust-colored paint; h. 118, l. 247. G7-356. XVIII, Baghdad.
- 2. Scoop, light brown ware, rust-colored paint; h. 123. G7-326. XVIII, 4J, Baghdad.

PLATE LXXIV

- a. Painted sherds from Stratum XVII.
- b. Painted sherds from Stratum XVII.

PLATE LXXV

- a. Bowl, fine light brown ware, dark brown paint; h. 104, d. ca. 240. G7-330. XVII, 3J, Baghdad.
- b. Detail of painted decoration of above.
- c. Painted sherd from Stratum XVII.
- d. Lenticular jar, spout missing, cream-colored ware, dark brown paint; ex. h. 80, d. 220. G7-235. XVII, 5J. 38-13-345.
- e. Lenticular jar with high spout, reddish-buff ware, purplish-red paint; overall h. 128, body d. 220. G7-234. XVII, 5J, Baghdad. (=Plate CXXIII, Fig. 113.)

PLATE LXXVI

- a. Painted sherds from Stratum XVI.
- b. Painted sherds from Stratum XVI.

PLATE LXXVII

- a. Painted sherds from Stratum XVI.
- b. Painted sherds from Stratum XVI.

PLATE LXXVIII

- a. Jar, hard light green ware, wet-smoothed, dark brown (originally red?) paint; h. 460, d. 540. G6-155. Below XII, 4K, Locus G36-29, grave, Baghdad. (=Plate CXXXIX, Fig. 309.)
- b. Detail of painted decoration of above.
- c. Jar, brown ware, buff slip, incised; h. 149, d. 140. G7-76. XIII, 6E, 38-13-52. (=Plate CXXXI, Fig. 220.)
- d. Incense burner, light brown ware, burning light red in spots, wet-smoothed, incised; ex. h. 200, d. 180. G6-360. XIII, 4J, Long Room of Eastern Shrine. 37-16-243. (=Plate CXXXII, Fig. 228.)

PLATE LXXIX

- a. 1. Cup fragment, no ware description, appliqué decoration. No field number. XI, 5K. No disposition.
- 2. Beaker fragment, dark gray ware, cream slip, incised and appliqué decoration. Ex. h. 130. G5-1410. XI, 6G. 36-6-59.
- b. Decorated sherds from Stratum XI.

- c. Spouted bowl, light gray-green ware, appliqué pellets on spout, incised; h. 88, d. 162, l. of spout 130. G5-1503. XI-A, 5Q, Baghdad. (=Plate CXXI, Fig. 342.)
- d. Bowl (?), light brown ware, impressed; h. 62, d. 120. G4-898. XI, 6-O. 35-10-26. (=Plate CXLIV, Fig. 377.)
- e. Pot, light greenish buff ware, wet-smoothed, bistre paint; h. 485, d. 480. G6-339. Below XII, 5J, Locus G36-131, grave. 37-16-89. (=Plate CXXXVI, Fig. 280.)
- f. Bowl, well-baked light green ware, black paint; h. 88, d. 148. G5-1561. XII, 4M. 36-6-218.

PLATE LXXX

- a. Decorated sherds from Strata XI-IX.
- b. *Kernos* fragment, no ware description; ex. l. 120. G3-307. IX, 11Q. Discarded.
- c. Bowl bearing modeled figures, gray ware, burnt red in firing, reddish-brown paint; h. 90, d. 260. G3-340. IX, 9Q, Baghdad.

PLATE LXXXI

- a. Female figurine, terra cotta, black and brown paint; h. 84, w. 35. G6-159. Northeast Base. 37-16-406. (=Plate CLIII, Fig. 1.)
- b. Female figurine, terra cotta, brown paint; h. 83, w. 41. G7-213. XVII, 5J. 38-13-500. (=Plate CLIII, Fig. 3.)
- c. Female figurine, terra cotta, brown paint; h. 77, w. 45. G7-279. XVII, 4J, Baghdad. (=Plate CLIII, Fig. 4.)
- d. 1. Female figurine, terra cotta, red paint; ex. h. 50. G7-300. XVIII, 4K. 38-13-718.
- 2. Female figurine, terra cotta, brown paint; ex. h. 54. G7-337. XVIII, 5G, Baghdad.
- 3. Female figurine, terra cotta, brown paint; ex. h. 62. G7-447. XIX, 4J, Baghdad.
- 4. Female figurine, terra cotta, bistre paint; ex. h. 51. G7-338. XIX, 5G. 38-13-881.
- 5. Female figurine, terra cotta, dark brown paint; h. 65. G7-416. XIX, 4G, Baghdad.
- 6. Female figurine, terra cotta, traces of dark brown paint; h. 105. G7-430. Below XVIII, 3K, Baghdad.
- 7. Female figurine, terra cotta, red paint; ex. h. 92. G7-358. Below XVII, 5K. 38-13-501.

PLATE LXXXII

- a. 1. Animal figurine, terra cotta; l. 36, h. 28. G7-7. XVI, 4G, Baghdad.
- 2. Animal figurine, terra cotta; l. 24, h. 23. G7-59. XI, 10-M. Discarded.

3. Animal figurine, terra cotta; l. 30, h. 25. G7-168. XVI, 5G. 38-13-311.
4. Animal figurine, terra cotta; l. 53, h. 36. No field number. XVII, 5G. Baghdad.
5. Animal figurine, terra cotta; l. 57, h. 43. No field number. XVII, 3J. 38-13-502.
- b. 1. Rattle, terra cotta; l. 78, d. 40. G7-296. Below XVII, 5G, Locus 7-37, grave. 38-13-516.
2. Animal figurine, terra cotta; l. 60, h. 40. G7-297. Below XVII, 5G, Locus 7-37, grave. 38-13-517. (=Plate CLIV, Fig. 12.)
- c. 1. Animal figurine, terra cotta; l. 66, h. 36. G5-1306A. X, 6K. Baghdad.
2. Animal figurine, terra cotta; ex. l. 40, ex. h. 27. No field number. Dump. Discarded.
3. Animal figurine, terra cotta; l. 58, h. 50. G5-1307A. XI, 6K. 36-6-67.
4. Animal figurine, terra cotta; l. 55, h. 44. G5-1250. X-A, 5J. 36-6-6.
5. Animal figurine, terra cotta; l. 46, h. 35. No field number. XI, 6K. Baghdad (?).
6. Animal figurine, terra cotta; l. 63, h. 31. G5-1283A. X-A, 6J. Baghdad.

PLATE LXXXIII

- a. Animal figurine, terra cotta, shell decoration; l. 75, h. 57. G7-53. XI, 10-M. Baghdad.
- b. 1. Gaming piece, terra cotta; h. 58, w. 36. G5-1721. XIII, 4Q. 36-6-339.
2. Gaming piece, terra cotta; ex. h. 36, w. 31. G5-1748. XIII, 4Q. 36-6-340.
- c. Animal figurine, terra cotta, brown paint; ex. l. 45, h. 41. G4-1159. XII, 4M. 35-10-217.
- d. Cult object (?), sun-baked clay; h. 150, d. 240. G3-146. IX, 10-O. 33-3-69.
- e. 1. Buffer, terra cotta; l. 52, h. 27. G7-269A. XVII, 4J. Baghdad.
2. Buffer, terra cotta; l. 43, h. 26. G7-268. XVII, 5J. 38-13-504.
- f. 1. Cone fragment, terra cotta, brown paint; ex. l. 82. No field number. XVIII, 5G. No disposition.
2. Nail-shaped muller, terra cotta; l. 98, d. 47. G7-444. XIX, 5J. 38-13-882.
3. Cone fragment, terra cotta; ex. l. 38, d. 34. G7-445. Below XVIII, 5G. 38-13-732.
4. Nail-shaped muller, terra cotta; l. 117, d. 60. G7-436. XIX, 5G. Baghdad.
5. Nail-shaped muller, white marble; l. 115, d. 53. G7-431. Below XVIII, 2J. 38-13-886.
6. Unidentified. No description.

- g. 1. Nail-shaped muller, terra cotta; l. 103, d. 60. G7-226. XVII, 4J. 38-13-497.
2. Nail-shaped muller, terra cotta, brown paint; l. 80, d. 40. G7-40. XVI, 3M. Baghdad.

PLATE LXXXIV

- a. 1-6. Gaming pieces, terra cotta; h. 31, d. 20. G7-215. XI-A, 7M (Round House, Room K). Baghdad and Philadelphia (38-13-23a-c).
7. Gaming piece, terra cotta; h. 19, d. 23. G7-217A. XI-A, 7M (Round House, Room K). 38-13-25.
8. Gaming piece, terra cotta; h. 21, d. 21. G7-217B. XI-A, 7M (Round House, Room K). Baghdad.
9. Gaming piece, terra cotta; h. 12, d. 17. G7-216B. XI-A, 7M (Round House, Room K). 38-13-24.
10. Gaming piece, terra cotta; h. 12, d. 18. G7-216A. XI-A, 7M (Round House, Room K). Baghdad.
- b. 1. Gaming piece, terra cotta; h. 35, d. 18. G7-24. XVI, 3J. 38-13-313. (=Plate CLVI, Fig. 52.)
2. Gaming piece, terra cotta; h. 51, ex. w. 20. G7-142. XVI, 4M. Baghdad. (=Plate CLVI, Fig. 58.)
3. Gaming piece, terra cotta; ex. h. 34, w. 27. G7-136. XVI, 3K. Baghdad. (=Plate CLVI, Fig. 55.)
4. Gaming piece, terra cotta; ex. h. 45, w. 27. G7-139. XV, 4M. 38-13-316.
5. Gaming piece, terra cotta; ex. h. 55, w. 21. G7-22. Dump. Baghdad.
6. Gaming piece, terra cotta; h. 50, d. 22. G7-151. XVI, 4M. Baghdad. (=Plate CLVI, Fig. 53.)
- c. Gaming pieces, terra cotta; l. 35 to 54, w. 15 to 20. G7-422 and G7-423. XVIII, 3-4J, Locus 7-58, grave. Baghdad and Philadelphia (38-13-756).

PLATE LXXXV

1. Spindle whorl, terra cotta, incised; d. 40, h. 25. G4-976. XII, 4Q. 35-10-223.
2. Spindle whorl, terra cotta, incised; d. 44, h. 28. G4-1197. XII, 5-O. 35-10-221.
3. Spindle whorl, terra cotta, punctured; d. 38, h. 24. G4-1152. XII, 5Q. 35-10-229c.
4. Spindle whorl, terra cotta, incised; d. 25, h. 24. G4-1180. XII, 4M. 35-10-226.
5. Spindle whorl, terra cotta, incised and punctured; d. 33, h. 16. G4-1218. XII, 5Q. 35-10-220.
6. Spindle whorl, terra cotta, incised; d. 24, h. 11. G4-674. XII, 4Q. 35-10-230.

7. Spindle whorl, terra cotta; d. 35, h. 27. G4-611. XII, 5-O. 35-10-228.
8. Spindle whorl, terra cotta, traces of red paint; d. 34, h. 21. G4-951. XII, 4Q. 35-10-227.
9. Spindle whorl, terra cotta, incised; d. 38, h. 22. G5-1580. XII, 6Q. 36-6-256.
10. Spindle whorl, terra cotta, punctured; d. 41, h. 26. G4-991. XII, 3-O. 35-10-229B.
11. Spindle whorl, terra cotta, punctured; d. 37, h. 23. G4-908. XII, 6M. 35-10-222.
12. Spindle whorl, terra cotta, punctured; d. 42, h. 25. G5-1233A. XII, 4M. 36-6-255.

PLATE LXXXVI

- a. 1. "Hut symbol," terra cotta; h. 125, w. 115. G5-1556. XI-A (?), 7K. 36-6-147.
2. "Hut symbol," terra cotta; h. 160, w. 146. G5-1374. XI, 6J. Baghdad. (=Plate CLVII, Fig. 63.)
3. "Hut symbol," terra cotta; h. 130, w. 124. G5-1293. XI, 6J. Baghdad.
4. "Hut symbol," terra cotta; h. 175, base d. 84. G5-1387. XI-A, 4K. 36-6-146.
5. "Hut symbol," terra cotta; h. 120, w. 150. G5-1510. XII, 5S. 36-6-242a.
6. "Hut symbol," terra cotta; h. 111, w. 120. G5-1604. XII, 4Q. 36-6-242c.
7. "Hut symbol," terra cotta; h. 72, d. 95. G5-1294. XI, 6K. Baghdad.
8. "Hut symbol," terra cotta; h. 135, w. 127. G5-1288. XI, 6J. 36-6-65. (=Plate CLVII, Fig. 65.)
9. "Hut symbol," terra cotta; h. 124, w. 110. G5-1524. XI-A, 7K. Baghdad.
- b. 1-5. Sling pellets, terra cotta; l. 84, w. 30, t. 24. G7-131. XIII Well. Baghdad and Philadelphia (38-13-72).

PLATE LXXXVIII

- a. 1. Seal, hemispheroidal shape; black steatite. D. 18, h. 7. G5-1328. XI, 3M. 36-6-112. (=Plate CLIX, Fig. 28.)
2. Seal, hemispheroidal shape; black steatite (?). D. 17, h. 8. G3-332. X, 11K. 33-3-158. (=Plate CLXI, Fig. 47.)
3. Seal, hemispheroidal shape; white paste. D. 18, h. 4. G6-90. XI-A, 5K. 37-16-83. (=Plate CLXI, Fig. 60.)
4. Seal, hemispheroidal shape; black steatite. D. 16, h. 4. G4-1088. XI, 4M. 35-10-115.
5. Seal, gable shape; serpentine. L. 18, w. 17, h. 6. G6-323. XIII, 3K. 37-16-357. (=Plate CLXIV, Fig. 95.)

6. Seal fragment, burton shape; black steatite. Ex. l. 19, w. 19, h. 6. G7-412. XIX, 4K. 38-13-744.
7. Seal, hemispheroidal shape; black steatite. D. 21, h. 8. G5-1640. XII, 6-O. 36-6-297. (=Plate CLXII, Fig. 76.)
8. Seal, hemispheroidal shape; black steatite. D. 22, h. 10. G6-257. XII, 5J. 37-16-209. (=Plate CLXX, Fig. 176.)
9. Seal, gable shape; white limestone (?). D. 17, h. 7. G4-1221. XII, 4M. 35-10-251.
10. Seal, hemispheroidal shape; black steatite. D. 28, h. 10. G7-114. XI-A, 10-M. 38-13-10. (=Plate CLXII, Fig. 77.)
11. Seal, hemispheroidal shape; black steatite. D. 12, h. 5. G4-649. XI, 6M. 35-10-113.
12. Seal, conoidal shape; terra cotta. D. 25, h. 19. G6-451. XIII, 4-O. 37-16-251. (=Plate CLX, Fig. 37.)
- b. Impression. Ex. d. 47. G5-1239. XII, 4M. 36-6-305. (=Plate CLXX, Fig. 179.)
- c. Seal, shape not described, lapis lazuli. D. 33, h. 16. G7-205. Dump. Baghdad. (=Plate CLXIX, Fig. 167.)

PLATE LXXXIX

- a. Impression on bulla, rope marks. L. of bulla 52, d. 35. No field number, X, 6-O. 33-3-238.
- b. Impression, on a clay ball. L. 9, w. 7. G6-234. Area A. Baghdad. (=Plate CLXVI, Fig. 123.)
- c. Impression, on a clay ball. D. 30. G7-58. XI-A, 9M. Baghdad. (=Plate CLXIII, Fig. 86.)
- d. Impression. D. ca. 33. G6-101. XI-A, 5-O. Baghdad. (=Plate CLXIII, Fig. 82.)

PLATE XC

- a. 1. String of 25 beads, baked clay. G7-115. XVI, 3M. Baghdad.
2. String of beads, white marble, obsidian and bone (2); l. 370mm. G7-353. XVIII, 4J, Locus 7-52, grave. 38-13-752.
3. String of beads, white paste, carnelian and green stone; l. 45mm. G7-366. XVIII, 3J, Locus 7-62, grave. 38-13-763.
4. String of beads, white paste; l. 415mm. G7-367. XVIII, 4G, Locus 7-61, grave. 38-13-760.
- b. 1. String of beads, black and gray stone. G7-373. XVIII, 3J, Locus 7-57, grave. Baghdad.
2. String of beads, white and black stone. G7-374. XVIII, 3J, Locus 7-57, grave. Baghdad.
3. String of beads, marble, obsidian, red stone and white paste. G7-372. XVIII, 3J, Locus 7-57, grave. 38-13-753.

PLATE XCI

- a. String of beads, gold (16), lapis, turquoise, amethyst, carnelian, gray limestone, shell and white paste; l. 840mm. G6-202. XII, 5K. Baghdad and Philadelphia (37-16-195).
- b. 1. Pendant, dark green stone; l. 22, w. 20. G7-411. XVIII, 3J. 38-13-750.
2. Pendant, dark green stone; l. 26, w. 25, t. 12. No field number. XIX. 38-13-890.
3. Pendant, serpentine (?); l. 18, w. 13, t. 2. G7-453. XIX, 4G, Locus 7-80, grave. 38-13-895.
4. Pendant, black diorite; l. 23, w. 17, t. 8. G3-37. IX, 7-O. 33-3-16.
5. Pendant, gray limestone; l. 21, w. 10. G3-311. IX, 11K. 33-3-149.
6. Pendant, green serpentine; l. 26, w. 17. G5-1368. XI, 4K. 36-6-106.
7. Pendant, buff marble; l. 28, w. 17, t. 8. G4-726. X, 5M. 35-10-12.
8. Pendant, green stone; l. 28, w. 10, t. 7. G3-255. IX, 9M. 33-3-126.
9. Pendant, green steatite; l. 40, d. 21. G6-68. XI-A, 7J. 37-16-72.
10. Pendant, gray limestone; l. 28, w. 16. G4-1100. Dump. 35-10-339.
11. Pendant, gray marble; l. 53, w. 30, t. 4. G5-1427. XI-A, 6M. 36-6-198.
12. Pendant, black diorite (?); l. 24, w. 14, t. 4. G6-199. Area A. 37-16-588.

PLATE XCII

- a. 1. Engraved bead, gray-green serpentine; l. 28, w. 17, t. 5. G6-390. XIII, 6-O. 37-16-352.
2. Engraved bead, mica schist; l. 30, w. 25, t. 6. G3-169. IX, 9Q. 33-3-76.
3. Engraved bead, black steatite; l. 25, d. 10. Below XII, 5M, Locus G36-106, grave. 37-16-196. (=Plate CLXXI, Fig. 16.)
4. Engraved bead, black steatite; l. 25, w. 20. G6-340. XI-A, 7S. 37-16-82. (=Plate CLXXI, Fig. 9.)
5. Engraved bead, gray-green serpentine; l. 23, w. 14. G6-389. XIII, 5-O. 37-16-354. (=Plate CLXXI, Fig. 13.)
6. Pendant or amulet, gray marble; l. 27, w. 18. G3-407. Dump. 33-3-201.
7. Pendant or amulet, gray marble; l. 17, h. 10, t. 4. G6-506. Area A. 37-16-589. (=Plate CLXXIV, Fig. 63.)
8. Pendant or amulet, breccia: white particles in dark brown matrix; l. 45, w. 27, t. 8. G4-972. XII, 4-O. 35-10-247.
9. Ornament, obsidian; l. 26, w. 17. G6-206.

Northeast Base. 37-16-423. (=Plate CLXXV, Fig. 69.)

10. Ornament, obsidian; l. 31, w. 26. G3-49. VIII or IX, 7K. 33-3-23.
11. Nail-shaped stud, gray limestone; l. 23, d. 5. G6-461. XIII, 6Q. 37-16-349. (=Plate CLXXV, Fig. 73.)
12. Nail-shaped stud, steatite; ex. l. 17, head d. 8. No field number. XII, 5S. 36-6-278.
13. Nail-shaped stud, red jasper; l. 22, head d. 7. G7-159. XVI, 5E. 38-13-332.
- b. 1. Tanged pendant, marble; h. 26, w. 26, t. 8. G7-473. XX, 4G. Baghdad.
2. Tanged pendant, gray marble; h. 19, w. 14, t. 4. G7-424. XIX, 4G. Baghdad.
3. Tanged pendant, gray marble; h. 26, w. 20, t. 2. G7-433. XVIII, 3K. Baghdad.
4. Tanged pendant, gray marble; ex. h. 32, w. 22, t. 9. G7-469. XX, 5G. 38-13-1083.
5. Tanged pendant, gray marble; ex. h. 19, w. 18, t. 4. G7-61. XV, 5Q. Baghdad.
6. Tanged pendant, serpentine; h. 31, w. 13, t. 5. G7-462. XIX, 5G. 38-13-887.
7. Tanged pendant, black steatite; h. 19, d. 12. G7-252. XII, 9M. 38-13-41.
8. Pendant or amulet, black steatite; h. 18, w. 15, t. 4. G7-495. XX, 5G. Baghdad.
- c. 1. Pendant or amulet, dark green serpentine; h. 27, w. 23, t. 6. G7-380. XVIII, 3J. 38-13-747.
2. Ornament, obsidian; h. 36, w. 26, t. 4. G7-479. XVIII, 5J. 38-13-748.
3. Ornament, obsidian; h. 36, w. 29, t. 3. G7-488. XVIII. Baghdad.
4. Pendant or amulet, terra cotta; l. 24. G7-208. XVI, 5Q. Baghdad.

PLATE XCIII

- a. 1. Blade, obsidian; l. 143, w. 27. No field number. Area A. 37-16-584.
2. Blade, flint; l. 110, w. 15. No field number. Area A. No disposition.
3. Scraper, obsidian; l. 76, w. 18. No field number. Area A. No disposition.
4. Blade, obsidian; l. 100, w. 19. No field number. 37-16-585.
5. Celt, stone; l. 40, w. 35. No field number. Area A. No disposition.
6. Celt, slate; l. 61, w. 40. No field number. Area A. No disposition.
7. Celt, greenstone; l. 43, w. 35. No field number. Area A. No disposition.
8. Celt, stone; l. 55, w. 31. No field number. Area A. 37-16-581.

9. Celt, granite; l. 70, w. 35. No field number. Area A. No disposition.
- b. 1. Blade, flint; l. 81, w. 18. G7-242. XVI. Baghdad.
2. Blade, flint; l. 72, w. 17. G7-243. XVI. 38-13-326.
3. Blade, chert; l. 72, w. 16. G7-246. XVI. Baghdad.
4. Blade, flint; l. 32, w. 18. G7-244. XVI. Baghdad.
- c. 1. Blade, obsidian; l. 77, w. 8. G7-241. XVI. Baghdad.
2. Blade, obsidian; l. 62, w. 10. G7-238. XVI. Baghdad.
3. Scraper, obsidian; l. 81, w. 20. G7-240. XVI. Baghdad.
4. Scraper, obsidian; l. 92, w. 19. G7-72. XVI. 38-13-324.
5. Blade, obsidian; l. 94, w. 23. G7-239. XVI. 38-13-323.

PLATE XCIV

- a. Hammer, basalt; l. 85, w. 70. G3-30. IX. 33-3-14.
- b. Core, flint; h. 100. G3-234. IX, 7Q. Baghdad.
- c. Hammer, black marble (?); l. 115, w. 50. G5-1453. XI-A, 5Q. Baghdad.
- d. Mace-head, slate; l. 122, t. 26, h. 42. G4-1097. XI-A, 5Q, Locus 142, grave. Baghdad.
- e. Mace-head, white marble; l. 84, w. 37, h. 38. G5-1658. XIII, 4-O. 36-6-343.
- f. Same as "d" above.

PLATE XCV

- a. 1. Celt, stone; l. 38, w. 32. No field number. XII, 7M. No disposition.
2. Celt, stone; l. 40, w. 37. No field number. XII, 9M. No disposition.
3. Celt, greenish-gray marble (?); l. 50, w. 26, t. 13. G7-230. XII, 8M. 38-13-36.
4. Celt, black marble (?); l. 29, w. 22, t. 9. G7-150. XI-A. Baghdad.
5. Celt, granite; l. 42, w. 33, t. 14. G7-262. XII, 9M. Baghdad.
6. Celt, black marble (?); l. 58, w. 30. No field number. XII, 8M. No disposition.
- b. 1. Celt, stone; l. 66, w. 55. No field number. XVIII, 3K. No disposition.
2. Celt, granite; l. 40, w. 27. G7-460. XIX, 5G. 38-13-885.
3. Celt, gray marble; l. 140, w. 54, t. 36. G7-459. XIX, 5G. Baghdad.
4. Celt, greenstone; l. 37, w. 15, t. 8. G7-415. XVI, 5G. Baghdad.
5. Celt, greenstone; l. 38, w. 28. G7-443. XIX, 5G. 38-13-884.

6. Celt, greenstone; l. 22, w. 16, t. 9. G7-413. Below XVIII, 4K. 38-13-740.
- c. 1. Celt, black stone; l. 38, w. 28, t. 14. G7-287. XVII, 4J. 38-13-508.
2. Celt, stone; l. 35, w. 33. No field number. XVII, 4K. No disposition.
3. Celt, greenish granite (?); l. 38, w. 27, t. 13. G7-263. XVII, 4G. Baghdad.
4. Celt, gray marble; l. 29, w. 19, t. 9. G7-221. XVII, 4K. 38-13-508.
5. Celt, red marble; l. 70, ex. w. 37. No field number. XVII, 4K (Room 37). No disposition.
6. Celt, gray marble; l. 30, w. 17, t. 7. G7-261. XVII, 8M. 38-13-509.
- d. 1. Ointment vase, black steatite; h. 42, w. 19. G7-194. XI-A, 8M. Baghdad.
2. Ointment vase, reddish-black stone; h. 53, ex. w. 33. G7-478. XII, 6-O. Baghdad.
- e. 1. Female figurine, white marble; ex. h. 35, w. 27. G7-309. XVIII, 3K. 38-13-742.
2. Female figurine (?), light gray marble; h. 36, w. 22. G7-291. XIII, 6-O. Baghdad.

PLATE XCVI

- a. 1. Gaming piece, alabaster; d. 22. No field number. XI, 4-O. No disposition.
2. Gaming piece, alabaster; h. 18, d. 27. G5-1414. XI-A, 4K, Locus 181, grave. 36-6-352a.
3. Gaming piece, alabaster; h. 17, d. 26. G5-1414. XI-A, 4K, Locus 181, grave. 36-6-352b.
4. Gaming piece, alabaster; d. 18. No field number. No provenance. No disposition.
5. Gaming piece, alabaster; d. 17. G5-1413. XI-A, 4K, Locus 181, grave. Baghdad.
6. Gaming piece, black marble; d. 19. G5-1260. XI, 6M. Baghdad.
7. Gaming piece, alabaster; h. 17, d. 24. G5-1414. XI-A, 4K, Locus 181, grave. Baghdad.
8. Gaming piece, marble; d. 20. G5-1413. XI-A, 4K, Locus 181, grave. 36-6-353b.
9. Gaming piece, marble; d. 17. G5-1413. XI-A, 4K, Locus 181, grave. Baghdad.
10. Gaming piece, alabaster; d. 19. G5-1413. XI-A, 4K, Locus 181, grave. 36-6-353a.
11. Gaming piece, alabaster; h. 30, d. 26. G5-1412A. XI-A, 4K, Locus 181, grave. 36-6-351. (=Plate CLXXIX, Fig. 53.)
12. Gaming piece, alabaster; h. 30, d. 26. G5-1412B. XI-A, 4K, Locus 181, grave. Baghdad.

13. Gaming piece, alabaster; d. 21. G5-1281. XI (?), 5J. 36-6-386.
- b. 1. Grinder, basalt; h. 55, d. 54. G4-698. XI, 6Q. Baghdad.
2. Grinder, basalt; h. 70, d. 49. G4-714. Edge of tepe, 4Q. Baghdad.
3. Grinder, basalt; h. 63, d. 66. G4-678. XI, 8M. No disposition.
4. Grinder, basalt; h. 58, d. 60. G4-651. XI, 6M. No disposition.
5. Grinder, basalt; h. 72, d. 76. No field number. Edge of tepe, 5J. No disposition.
6. Grinder, granite; h. 60, d. 63. G4-691. XI, 5M. Baghdad.

PLATE XCVII

- a. 1. Palette, marble; l. 76, w. 54. G7-163. XVI, 5E. Baghdad.
2. Hammer, sandstone; l. 85, w. 48, h. 46. G7-393. XIII, 11M. Baghdad.
3. Mace-head, white marble; d. 55, h. 46. G7-12. X-A, 10-M. Baghdad.
4. Mace-head, haematite; h. 37, d. 49. G7-349. XVIII, 3J. 38-13-741.
5. Mace-head, haematite; h. 36, d. 44. G7-16. XVI, 5K. 38-13-329.
6. Palette, gray marble; ex. l. 80, w. 78, h. 23. G7-486. XVIII, 2J. 38-13-738.
7. Palette, diorite (?); l. 125, w. 66, h. 12. G7-450. XIX, 4G, Locus 7-80, grave. 38-13-894.
8. Palette, red breccia; l. 133, w. 63. G7-417. LXVIII, 4J, Locus 7-68, grave. Baghdad.
9. Palette, light brown marble; l. 72, w. 46. G7-193. XV, 5Q. 38-13-122.
10. Palette, diorite (?); l. 88, w. 62, h. 14. G7-41. XVI, 5K. Baghdad.
- b. 1. Weight, marble; h. 35, d. 40. No field number. IX, 8K. 33-3-285.
2. Weight, marble; h. 24, d. 36. G3-106. IX, 9M. 33-3-49.
3. Weight, reddish-brown marble; l. 39, w. 34, t. 23. G7-102. XIII Well. 38-13-68.
4. Weight, dark brown haematite; l. 15, w. 14, t. 12. G7-381. XVIII, 3G. 38-13-743.
5. Weight, obsidian; h. 12, d. 14. G3-15. IX, 4M. 33-3-8.
6. Weight, black marble; h. 21, l. 35, w. 29. G4-916. XI, 4-O. 35-10-89.
7. Weight, gray marble; h. 28, d. 22. No field number. X, 5Q. 33-3-286.
8. Weight, black marble (?); l. 22, w. 14, t. 12. G4-608. XIII, 5-O. 35-10-282.
9. Weight, dark brown haematite; h. 14, d. 14. G6-595. XII, 3J. 37-16-186.

- c. Object, black steatite; l. 58, w. 17, t. 14. G7-156. XIII Well. 38-13-67.
- d. 1. Mortar, basalt; d. 232. G5-1314. XI, 6J. Baghdad.
2. Mortar, basalt; d. 205, h. 95. G5-1416. XI-A, 4J. 36-6-172.

PLATE XCVIII

- a. 1. Axe, copper; l. 61, w. 35, t. 7. G7-75. XI, 10-M. Baghdad.
2. Axe, copper; l. 73, w. 32, t. 9. G7-271. XII, 11M. 38-13-38.
3. Pin, copper; l. 55, t. 3. No field number. XI, 8M. No disposition.
4. Pin, copper; l. 96. G7-140. 5S, edge of tepe. Discarded.
5. Ring, copper; d. 11. No field number. XVII, 5K. No disposition.
6. Awl, copper; l. 81. No field number. XVII, 6M. No disposition.
- b. 1. Awl, bone; l. 110, w. 15. G7-71. XVI, 3J. Baghdad.
2. Awl, bone; l. 116, w. 16, t. 7. G7-32. XVI, 3J. 38-13-330.
3. Awl, bone; l. 98, w. 11. No field number. XVI, 5G. No disposition.
4. Awl, bone; l. 130, w. 19. No field number. XVII, 4K. No disposition.
5. Spatula, bone, bitumen handle; l. 140. G7-277. XVII, 3J. Baghdad.

PLATE XCIX

- a. 1. Awl, bone; l. 132, w. 19. G7-110. XIII Well. Baghdad.
2. Awl, bone; l. 118, w. 15. G7-135. XIII Well. 38-13-69.
3. Awl, bone; l. 125, w. 14. G7-109. XIII Well. Baghdad.
4. Awl, bone; l. 61, w. 19. G7-178. XIII Well. 38-13-70.
- b. 1. Playing pipe, bone; l. 88, w. 23. G7-210. XVII, 5J. 38-13-510.
2. Playing pipe, bone; ex. l. 83, w. 15. G7-190. XVI, 5Q. Baghdad.
- c. 1. Awl, bone, clay handle; l. 71, d. 25. XII, 4K. Baghdad.
2. Playing pipe, bone; ex. l. 106, w. 22, t. 14. G6-262. XII, 4J. 37-16-187. (=Plate CLXXXII, Fig. 12.)
- d. 1. Playing pipe, bone; ex. l. 109, w. 23, t. 12. G6-543. XV, 5M. 37-16-386. (=Plate CLXXXII, Fig. 13.)
2. Playing pipe, bone; ex. l. 105, w. 25. G6-21. XII, 5Q. 37-16-188. (=Plate CLXXXII, Fig. 14.)

3. Playing pipe, bone; l. 165, w. 21. G6-590. XII, 11M, Locus G36-171, grave. Baghdad. (=Plate CLXXXII, Fig. 15.)

PLATE CIII

1. Pot, green ware, wet-smoothed, black paint; h. 119, d. 145. G6-281. Tomb G36-104. Baghdad.
2. Bowl, well-baked gray-black ware, thick brown slip on exterior, faintly burnished; h. 65, d. 115. G6-284. Tomb G36-104. 37-16-217.
3. Bowl, hard gritty gray ware, wet-smoothed; h. 86, d. 210. G6-413. Tomb G36-150. Baghdad.
4. Jar, brown ware, mottled brown and black wash on exterior; h. 107, d. 114. G6-258. Tomb G36-60. Baghdad.
5. Bowl, coarse brown ware; h. 82, d. 250. G4-996. Tomb 124. Discarded.
6. Jar, grayish-green ware, lightly-burnished exterior; h. 196, d. 136. G4-802. Tomb 111. 35-10-324.
7. Spouted bowl, obsidian; h. 68, d. 126. G4-635. Tomb 102. 35-10-287. (=Plate LIII.c.)
8. Spouted jar, obsidian; h. 100, d. 116. G4-634. Tomb 102. Baghdad. (=Plate LIII.b.)
9. Pot, oölitic limestone; h. 48, d. 106. G4-737. Tomb 109. 35-10-295. (=Plate LIII.d.)
10. Bowl, marble; h. 94, d. 156. G4-738. Tomb 109. 35-10-296.
11. Jar, oölitic limestone; h. 43, d. 49. G3-232. Tomb 24. 33-3-116.
12. Jar black and white marble; h. 63, d. 60. G4-736. Tomb 109. Baghdad. (=Plate LIII.f.)

PLATE CIV

13. Beaker, serpentine; h. 79, d. 88. G4-773. Tomb 110. 35-10-315. (=Plate LIII.c.)
14. Beaker, serpentine; h. 96, d. 72. G4-772. Tomb 110. Baghdad.
15. Double-bowl, gray marble; h. 90, overall d. 335. G3-292. Tomb 31. Baghdad.
16. Bowl, oölitic limestone; h. 28, d. 43. G3-288. Tomb 31. 33-3-139.
17. Ointment vase, alabaster; h. 32, d. 17. G3-283. Tomb 31. Baghdad.
18. Bowl fragment, serpentine; h. 55, d. 104. G3-424. Tomb 45. Baghdad.
19. Handled bowl, serpentine; h. 30, body d. 43, overall d. 80. G3-285. Tomb 31. Baghdad. (=Plate LIII.a.)
20. "Whetstone" with gold band, slate or shale; l. 80, w. 20, t. 3. G4-822. Tomb 114. Baghdad.
21. Mace-head, black haematite; h. 50, d. 45. G4-823. Tomb 114. 35-10-325.

22. Blade, obsidian; l. 84, w. 11, t. 4. G3-242. Tomb 29. Baghdad.

23. "Hur symbol," gray marble; h. 96, d. 60. G3-293. Tomb 31. Baghdad. (=Plate LII.b, No. 1.)

24. Mace-head, marble; h. 50, d. 50. G4-636. Tomb 102. Baghdad.

PLATE CV

25. Comb, ivory; l. 136, w. 20. G4-775. Tomb 110. 35-10-322.
26. Comb, bone or ivory; l. 104, w. 32, t. 6. G4-761. Tomb 109. Baghdad.
27. Comb, ivory; ex. l. 196, w. 41. G3-380. Tomb 34. 33-3-189. (=Plate LIV.b.)
28. Comb, ivory; l. 128, w. 22, t. 3. G3-151. Tomb 24. 33-3-71. (=Plate LIV.c, No. 1.)
29. Hair-pin, ivory, lapis lazuli and turquoise inlay; four gold bands; l. 200, d. 10. G3-152. Tomb 24. Baghdad. (=Plate LIV.c, No. 2.)
30. Hair ornament, ivory; l. 107, w. 36, t. 5. G3-284. Tomb 31. 33-3-138.
31. Spatula with gold band, bone; l. 117, w. 18. G4-826. Tomb 114. Baghdad.
32. Spatula, bone; ex. l. 143, w. 30. G4-827. Tomb 114. 35-10-330.
33. Spatula, bone; ex. l. 115, w. 27. G4-827. Tomb 114. Baghdad.
34. Spatula, bone; ex. l. 122, w. 16. G4-827. Tomb 114. Baghdad.

PLATE CVI

35. Seal, rectangular plaque; white paste; l. 19, w. 16, t. 5. G6-363. Tomb G36-134. Baghdad.
36. Seal, rectangular plaque; grayish-black steatite; l. 24, w. 18, t. 5. G6-297. Tomb G36-110. Baghdad.
37. Seal, hemispheroidal shape; lapis lazuli; d. 19, h. 10. G4-769. Tomb 110. 35-10-323.
38. Seal, hemispheroidal shape; lapis lazuli. d. 18, h. 10. G4-831. Tomb 114. Baghdad.
39. Seal, rectangular plaque; ivory; l. 45, w. 36, t. 9. G3-289. Tomb 31. 33-3-140. (=Plate LIX.c.)
40. Bead, lapis lazuli; w. 16, t. 11. G4-753A. Tomb 109. 35-10-303.
41. Bead or button, lapis lazuli; d. 15, h. 5. G4-753B. Tomb 109. Baghdad.
42. Bead, lapis lazuli; l. 12, w. 6, t. 5. G4-753C. Tomb 109. Baghdad.
43. Bead or seal, lapis lazuli; l. 14, w. 14, t. 7. G4-753D. Tomb 109. Baghdad.
44. Bead, ivory; d. 26, t. 6. G6-330C. Tomb G36-60. 37-16-192.

45. Pendant, yellow paste; h. 24, d. 12. G6-330B. Tomb G36-60. 37-16-191.
46. Pendant, gold and lapis lazuli; l. 17, w. 5, h. 6. G4-759. Tomb 109. Baghdad.

PLATE CVII

47. Pendant, gold; h. 8, w. 5. G4-794. Tomb 111. Baghdad.
48. Pendant, gold; h. 28, w. 7. G4-794. Tomb 111. Baghdad.
49. Pendant, gold; h. 15, w. 7. G4-750. Tomb 109. 35-10-313 and Baghdad.
50. Pendant, gold; h. 30, w. 19. G3-174. Tomb 25. Baghdad.
51. Pendant, copper; h. 19, w. 13. G6-376. Tomb G36-135. Baghdad.
52. Pendant, obsidian; d. 29, t. 4. G6-377. Tomb G36-135. 37-16-199.
53. Ribbon rosette, gold; l. 60, d. 36. G4-741. Tomb 109. 35-10-306. (=Plate LVIII.a, No. 3.)
54. Ribbon rosette, gold; l. 50, d. 26. G3-199A. Tomb 29. Baghdad.
55. Rosette, gold, lapis lazuli center; d. 73. G4-830. Tomb 114. Baghdad. (=Plate LVIII.b, No. 5.)
56. Rosette, gold; d. 19. G4-765. Tomb 110. Baghdad. (=Plate LIX.a, No. 6.)
57. Rosette, gold; d. 26. G3-199B. Tomb 29. Baghdad.

PLATE CVIII

58. Rosette, gold, turquoise center; d. 67. G4-766B. Tomb 110. 35-10-320B. (=Plate LVIII.b, No. 4.)
59. Stud, gold; l. 31, w. 18. G4-746. Tomb 109. 35-10-311 and Baghdad. (=Plate LIX.a, No. 1.)
60. Stud, gold; l. 21, w. 12. G4-768. Tomb 110. 35-10-321.
61. Stud, gold; l. 32, w. 5. G4-748. Tomb 109. 35-10-312 and Baghdad.
62. Stud, gold; l. 25, w. 4. G4-748. Tomb 109. 35-10-312 and Baghdad.
63. Stud, gold; d. 18, h. 7. G4-744. Tomb 109. 35-10-309 and Baghdad.
64. Tube, gold; l. 77, d. 13. G4-747. Tomb 109. Baghdad. (=Plate LIX.a, No. 10.)
65. Wolf's head, electrum; l. 30, h. 23. G4-821. Tomb 114. Baghdad. (=Plate LIX.b.)

PLATE CIX

1. Jar, well-levigated brown ware, traces of black wash on exterior; h. 208, d. 205. G6-507. Area A Well. Baghdad.

2. Jar, soft buff ware, white grits; h. 245, d. 220. G6-504. Area A Well. Baghdad.
3. Jar, light red ware; h. 310, d. 330. G6-502. Area A Well. Baghdad.
4. Jar, brown ware, traces of greenish-gray slip, white grits, bistre paint; h. 232, d. 300. G6-496. Area A Well. Baghdad.
5. Jar, reddish-brown ware, cream slip on exterior, red paint; ex. h. 240, d. 315. G6-528. Area A Well. Baghdad.
6. Jar, soft reddish-brown ware, traces of cream slip, red paint; h. 228, d. 290. G6-505. Area A Well. 37-16-428.
7. Bowl, well-levigated drab brown ware, wet-smoothed, brown paint; ex. h. 125, d. 250. G6-625. Area A Well. Baghdad.
8. Bowl, gray-buff ware, chocolate-brown wash on both surfaces, white grits; h. 78, d. 295. G6-508. Area A Well. Baghdad.
9. Bowl, hard light red ware, wet-smoothed buff surfaces, bistre paint; h. 110, d. 300. G6-497. Area A Well. Baghdad.

PLATE CX

10. Bowl, light brown ware, dark red paint; h. 92, d. 300. G7-104. Area A. Baghdad.
11. Bowl, light brown ware, wet-smoothed, brown and red painted decoration; h. 83, d. 288. G6-232. Area A. Baghdad.
12. Bowl, well-baked light brown ware, wet-smoothed cream surfaces, red and bistre paint; h. 50, d. 195. G6-407. Area A. Baghdad.
13. Bowl, hard light red ware, cream slip on interior, buff slip on exterior, bistre paint; h. 75, d. 260. G6-433. Area A, Level D. Baghdad.

PLATE CXI

14. Bowl, hard, well-levigated thin brown ware, cream slip, bright reddish-brown paint; h. 45, d. 220. G6-568. Area A, Level D. Baghdad.
15. Bowl, hard buff ware, brown paint; h. 43, d. 180. G6-530. Area A, Levels D-E. 37-16-446.
16. Bowl, hard buff ware, red and black paint; h. 35, d. 118. G6-233. Area A. Baghdad.
17. Bowl, light brown ware, red and bistre paint; h. 48, d. 145. G6-572. Area A. Baghdad.

PLATE CXII

18. Bowl, hard light brown ware, wet-smoothed, lustrous bistre paint; h. 39, d. 165. G6-418. Area A, Level D. 37-16-444.
19. Bowl, well-baked gray ware, wet-smoothed, red and brown painted decoration; h. 50, d. 154. G6-419. Area A. 37-16-454.
20. Bowl, brown ware, wet-smoothed, red and

bistre paint; h. 22, d. 90. G6-549. Area A, Levels B-C. Baghdad.

21. Bowl, hard light brown ware, white grits, reddish-brown paint; h. 90, d. 345. G6-574. Area A. 37-16-451.
22. Bowl, light brown ware, wet-smoothed, fine white grits, sepia and red paint; h. 70, d. 200. G6-448 Area A. 37-16-453.

PLATE CXIII

23. Bowl, hard, gritty brown ware, cream slip, brown paint; h. 182, d. 324. G6-351. Area A. 37-16-429.
24. Bowl, hard drab ware, wet-smoothed, black and brown paint; h. 49, d. 152. G6-222. Northeast Base. 37-16-405.
25. Bowl, hard light brown ware, bistre paint gone orange, six holes bored for repair, incised W on base; h. 35; d. 130. G6-427. Area A. 37-16-448.
26. Bowl, light brown ware, wet-smoothed, red paint; h. 20, d. 120. G6-424. Area A. Baghdad.
27. Bowl, hard light brown ware, wet-smoothed, brown paint; h. 45, d. 147. G6-472. Area A, Level F, Locus G36-158, grave. 37-16-443.
28. Bowl, well-baked, thin brown ware, reddish-brown paint; h. 45, d. 185. G6-236. Northeast Base. Baghdad.

PLATE CXIV

29. Bowl, well-baked light brown ware, cream slip, black paint; h. 70, d. 135. G6-423. Area A, Level D. 37-16-450.
30. Bowl, reddish-brown ware; h. 40, d. 143. G7-199. Northeast Base. 38-13-1092.
31. Bowl, hard brown ware, buff slip on exterior, bistre paint; ex. h. 105, d. 260. G6-576. Area A, Levels D-E. 37-16-452.
32. Bowl, gray-green ware, buff slip, black and brown paint; h. 86, d. 150. G6-221. Area A. Baghdad (?).
33. Bowl, brown ware, light brown slip on exterior, white grits, red and brown paint; h. 86, d. 165. G6-189. Area A, Level B. Baghdad.
34. Cup, light brown ware, dark brown and purple paint; h. 46, d. 66. G6-217. Northeast Base. 37-16-404.
35. Cup, hard light brown ware, gray surfaces; h. 50, d. 93. G6-346. Area A. Baghdad (?).
36. Cup, hard light brown ware, wet-smoothed; h. 80, d. 75. G6-342. Area A. Baghdad.
37. Cup, hard pink ware, cream slip on exterior; h. 48, d. 64. G6-420. Area A. 37-16-442.

38. Cup, brown ware, wet-smoothed, dark brown paint; h. 57, d. 94. G6-237. Northeast Base. Baghdad.

39. Chalice fragment, brown ware, dark brown paint; ex. h. 87, d. 133. G6-207. Area A. 38-16-439.
40. Chalice fragment, hard green ware, wet-smoothed, greenish (original bistre?) paint; ex. h. 75, d. 80. G6-550. Area A, Level A. 37-16-440.
41. Chalice, well-baked light brown ware, white tempering material, wet-smoothed, red and faded black paint; h. 110, d. 112. G6-344. Area A. 37-16-438.
42. Chalice fragment, hard red ware, cream slip, bistre paint; ex. h. 73, d. 75. G6-571. Area A Level C. Baghdad.
43. Chalice, red ware, cream slip on exterior, reddish-brown paint; h. 49, d. 74. G6-229. Area A. Baghdad.

PLATE CXV

44. Pot, light brown ware, black paint; h. 65, d. 140. Area A, Level E. No field number and no disposition.
45. Jar, hard buff ware, wet-smoothed, lustrous bistre paint; h. 75, d. 122. G6-388. Area A, Level B. 37-16-434.
46. Jar, light brown ware, wet-smoothed, white grits, bistre paint; h. 100, d. 163. G6-440. Area A. 37-16-432.
47. Pot, gritty light brown ware, burnt black outside, lightly burnished; ex. h. 128, d. 170. G6-402. Area A, Level D. Baghdad.
48. Pot, brown ware, cream slip, lustrous bistre paint; h. 77, d. 153. G6-465. Area A, Level E. 37-16-430.
49. Jar, brown ware, traces of red paint; h. 97, d. 142. G6-475. Area A, below Level F, Locus G36-159, grave. Baghdad.
50. Jar, hard red ware, black and white grits, traces of slip on exterior, faded bistre paint; ex. h. 131, d. 172. G6-359. Area A. 37-16-431.
51. Jar, hard, light green ware, wet-smoothed, brown paint, overlaid; ex. h. 106, d. 134. G6-403. Area A, Level D. Baghdad.
52. Jar, light brown ware, bistre paint; ex. h. 110, d. 146. No field number. Area A, Level F. No disposition.
53. Jar, well-levigated light brown ware, some white grits, thin cream slip on exterior, red paint; h. 400, d. 276. G6-383. Area A, Level B. Baghdad.
54. Jar, light brown ware, buff slip on exterior,

red paint; ex. h. 275, d. 325. G6-242. Northeast Base. Baghdad.

PLATE CXVI

55. Jar, gray ware, brown slip, black paint; h. 165, d. 163. G6-328. Area A. Baghdad.
56. Jar, well-baked gray ware, black and brown paint; h. 95, d. 109. G6-231. Area A. 37-16-435.
57. Jar, brown ware, buff slip, dark brown paint; h. 321, d. 285. G6-215. Northeast Base. 37-16-403.
58. Jar, buff ware, wet-smoothed, bistre paint; h. 305, d. 262. G6-347. Area A. 37-16-426.
59. Jar, well-baked gray ware, brown slip, burnt-sienna paint; h. 104, d. 114. G6-275. Area A. Baghdad.
60. Jar, buff ware, wet-smoothed, red and brown paint; h. 218, d. 205. G6-349. Area A. Baghdad.

PLATE CXVII

61. Jar, well-baked buff ware, wet-smoothed, reddish-brown paint, showing black where overlaid; h. 313, d. 283. G6-348. Area A. 37-16-427.

PLATE CXVIII

62. Jar, well-baked, fine light brown ware, wet-smoothed, buff surfaces, burnt sienna and dark red (now black) paint; h. 255, d. 265. G6-276. Area A. Baghdad.
63. Miniature pot, light brown ware, red and black paint; h. 40, d. 56. G6-218. Northeast Base. Baghdad.
64. Miniature jar, well-baked light brown ware, wet-smoothed, brown paint; h. 60, d. 68. G6-438. Area A. Baghdad.
65. Miniature bowl, buff ware, wet-smoothed, red paint; h. 40, d. 82. G6-439. Area A. Baghdad.
66. Miniature pot, buff ware, black and red paint; h. 48, d. 74. G6-177. Area A. 37-16-436.
67. Miniature jar, light brown ware, red paint; h. 42, d. 42. G6-421. Area A. Baghdad.
68. Miniature pot, mottled black and gray ware; h. 34, d. 40. G6-211. Area A. 37-16-459.
69. Miniature bowl, buff ware; h. 20, d. 54. G6-212. Area A. Baghdad.
70. Miniature bowl, poorly-baked brown ware; h. 40, d. 70. No field number. Area A, Level D. No disposition.

PLATE CXIX

71. Bowl, light brown ware, brown paint; h. 100, d. 210. G7-497. XX, 4G. 38-13-896.

72. Bowl, black ware, surfaces burnt brown, red paint; h. 25, d. 99. No field number. XX. 38-13-898.

73. Bowl, fine light brown ware, brown paint; h. 32, d. 156. No field number. XIX. No disposition.
74. Cup, fine reddish-brown ware, red paint; h. 99, d. 145. G7-498. XX, 5G (tholos). Baghdad.
75. Bowl, coarse, greenish ware; h. 91, d. 241. G7-407. XVIII, 3K. Baghdad.
76. Bowl, coarse reddish-brown ware; h. 165, d. 260. G7-410. XVIII, 3J, Locus 7-66, grave. Discarded.
77. Bowl, light brown ware; h. 136, d. 330. G7-319. XVIII, 5J. Baghdad.
78. Jar, reddish-brown ware; h. 135, d. 118. G7-289. XVII. No disposition.

PLATE CXX

79. Jar, coarse light brown ware, light gray-green slip; h. 80, d. 104. G7-500. XX, 5G (tholos). Baghdad.
80. Jar, coarse light brown ware; h. 220, d. 270. No field number. XVIII, 5G. No disposition.
81. Jar, coarse red ware; h. 100, d. 88. No field number. XVII, 5G. No disposition.
82. Jar, coarse reddish-brown ware; ex. h. 335, d. 462. No field number. Below XIX, 4J, Locus 7-73, grave. Discarded.
83. Bowl, rough drab ware, bistre paint; h. 70, d. 138. G7-281. XVII, 3J. 38-13-340.
84. Bowl, reddish-brown ware, black paint; h. 78, d. 138. G7-285. XVII, 4K. Baghdad.
85. Bowl, light brown ware, dark brown paint; h. 75, d. 130. G7-218. XVII, 5G. 38-13-337.
86. Bowl, thin green ware, bistre paint; h. 64, d. 138. G7-341. XVIII, 4G. 38-13-522.
87. Bowl, light green ware, dark brown paint; h. 120, d. 238. G7-338. XVIII, 5J. Baghdad.
88. Bowl, gritty light brown ware, bistre paint; h. 75, d. 161. G7-369. XVIII, 3J, Locus 7-62, grave. 38-13-761.

PLATE CXXI

89. Bowl, light brown ware, dark brown paint; h. 112, d. 254. G7-408. XVIII, 4G, Locus 7-70, grave. Baghdad. (=Plate LXXIII.d.)
90. Bowl, fine light brown ware, dark brown paint; h. 100, d. 240. G7-409. Below XVII, 3J, Locus 7-69, grave. Baghdad.
91. Bowl, gritty light brown ware, bistre paint; h. 106, d. 170. G7-386. XIX, 3K. 38-13-772.
92. Bowl, yellowish-green ware, brown paint; h. 110, d. 169. G7-461. XIX, 4J. 38-13-773.

93. Bowl, light green ware, bistre paint; h. 142, d. 225. G7-283. XVII, 3J. 38-13-341.
94. Bowl, reddish-brown ware, color of paint not specified; h. 98, d. 174. G7-350. Below XVII, 3J, Locus 7-53, grave. Baghdad.
95. Bowl, light brown ware, rust-colored paint; h. 85, d. 178. G7-306. Below XVII, 3J, Locus 7-38, grave. Baghdad.
96. Bowl, light brown ware, buff surfaces, wet-smoothed, dark brown paint; h. 122, d. 210. G7-304. XVIII, 3K. 38-13-338.
97. Bowl, fine gray-green ware, dark paint; h. 62, d. 113. G7-31. XVII, 3-O. Baghdad.
98. Bowl, light brown ware, brown paint; h. 70, d. 105. G7-310. XVIII, 3J, Locus 7-45, grave. Baghdad.
99. Bowl, green ware, dark brown paint; h. 120, d. 324. G7-352. Below XVIII, 5J, Locus 7-54, grave. Baghdad.
100. Bowl, light yellowish-green ware, bistre paint; h. 87, d. 230. G7-220. XVII, 4J. 38-13-339.

PLATE CXXII

101. Jar, light brown ware, color of paint not given; ex. h. 210, d. 280. No field number. XIX, 2J. No disposition.
102. Jar, well-baked green ware, bistre paint; h. 113, d. 168. G7-387. XVIII, 4G, Locus 7-70, grave. 38-13-770.
103. Jar, fine green ware, dark brownish-black paint; h. 90, d. 126. G7-427. XVIII, 3G, Locus 7-72, grave. Baghdad.
104. Jar, fine light green ware, dark brown paint; h. 100, d. 153. G7-403. XVIII, 3J, Locus 7-66, grave. Baghdad.
105. Jar, light gray ware, brown paint; h. 83, d. 99. G7-278. XVII, 3J. Baghdad.
106. Jar, light green ware, brown paint; h. 125, d. 170. G7-303. Below XVII, 3J, Locus 7-43, grave. 38-13-751.
107. Jar fragment, light brown ware, white grits, brown paint. No field number. Below XVIII. No disposition.
108. Jar, reddish-brown ware, dark reddish-brown paint; h. 123, d. 168. G7-406. Below XVIII, 4J, Locus 7-68, grave. Baghdad.
109. Jar, light brown ware, dark red paint; h. 185, d. 169. G7-404. Below XVIII, 4J, Locus 7-68, grave. 38-13-767.
110. Jar, light brown ware, dark brown paint; h. 165, d. 146. G7-428. XIX, 3J. Baghdad.
111. Jar, light green ware, dark red paint; h. 215, d. 180. G7-405. XVIII, 3J, Locus 7-66, grave. Baghdad.

PLATE CXXIII

112. Scoop, light gray ware, brown paint; h. 110, l. 316, w. 101. G7-282. XVII, 4Q. Baghdad.
113. Lenticular jar with high spout, reddish-buff ware, purplish-red paint; overall height 128, body d. 220. G7-234. XVII, 5J. Baghdad. (=Plate LXXV.e.)
114. Lid (?), brown ware, light green slip, bistre paint; ex. h. 73, w. 93. G7-343. XVIII, 5G. 38-13-535.
115. Miniature jar, gritty light brown ware, rust paint; h. 50, d. 66. G7-384. Below XVIII, 4K, Locus 7-67, grave. Baghdad.
116. Miniature jar, light green ware, bistre paint; h. 54, d. 70. G7-322. Below XVII, 4G, Locus 7-47, grave. 38-13-519.
117. Miniature cup, light brown ware, dark red paint; h. 63, d. 81. G7-227. XVII, 5G. Baghdad.
118. Miniature jar, coarse light brown ware; h. 72, d. 77. G7-399. Below XVII, 3J, Locus 7-69, grave. 38-13-521.
119. Miniature jar, reddish-brown ware; h. 56, d. 56. G7-323. Below XVII, 4G, Locus 7-47, grave. Baghdad.
120. Miniature jar, reddish-buff ware; h. 41, d. 45. G7-174. XVII, 4Q. Baghdad.
121. Miniature jar, coarse light brown ware; h. 42, d. 57. Below XVII, 4G, Locus 7-47, grave. 38-13-518.

PLATE CXXIV

122. Bowl, hard light brown ware, wet-smoothed, lustrous bistre paint burnt brown and red; h. 50, d. 138. G6-473. XV, 4K. 37-16-473.
123. Bowl fragment, hard buff ware, wet-smoothed, red and black paint. No field number. XVI, 4-O. 37-16-395.
124. Bowl, coarse light brown ware; h. 70, d. 102. G7-19. XVI, 3J. 38-13-127.
125. Bowl, coarse buff ware, cream slip on exterior; h. 80, d. 130. No field number. XV, 5-O. Discarded.
126. Bowl, brown ware, brown paint; h. 100, d. 142. G7-45. XVI, 3J. 38-13-131.
127. Bowl, brown ware, reddish-brown paint; h. 100, d. 160. G7-26. XV, 3M, Locus 7-6, grave. 38-13-87.
128. Bowl, green ware, greenish-black paint; h. 76, d. 120. G7-141. XVI, 3M. Baghdad.
129. Bowl, reddish-brown ware, light brown surfaces, bistre paint; h. 82, d. 130. G7-11. XVI, 4J. 38-13-132.
130. Bowl, brown ware, red paint; h. 75, d. 115. G7-33. XVI, 6E. 38-13-130.

131. Bowl, green ware, bistre paint; h. 104, d. 153. G7-49. XVI, 3J. 38-13-129.
132. Bowl, light buff ware, dark brownish-red paint; h. 64, d. 150. No field number. XV, 5G, Locus 7-6, grave. No disposition.
133. Bowl, light brown ware, dark brown paint; h. 96, d. 154. G7-25. XV, 5G, Locus 7-6, grave. Baghdad.
134. Bowl, grayish-green ware, thin slip of same color, brown paint; h. 96, d. 122. G7-48. XVI, 3J. Baghdad.
135. Bowl, coarse light brown ware, red wash; h. 100, d. 220. G7-223. XVI, 3J. Baghdad.
136. Bowl, brown ware, yellowish-green surfaces, dark brown paint; h. 120, d. 285. G7-200. XVI, 3-O. 38-13-128.

PLATE CXXV

137. Cup, brown ware, faded red paint; h. 70, d. 86. G7-15. XVI, 2J. 38-13-125.
138. Cup, light yellowish-green ware, brown (originally dark red?) paint; h. 82, d. 98. G7-30. XVI, 3M. 38-13-124.
139. Cup, light brown ware, red paint; h. 65, d. 72. G6-554. XV, 4M. 37-16-365.
140. Cup, hard light yellow ware, faded bistre paint; h. 70, d. 80. G6-561. XV, 5M. Baghdad.
141. Cup, grayish-brown ware, cream slip on exterior, traces of red paint on base; h. 78, d. 93. G6-585. XV, 5M. Baghdad.
142. Cup, black ware, rough brown slip; h. 68, d. 81. G6-492. XV, 4M. Baghdad.
143. Beaker, well-baked light brown ware, bistre wash over both surfaces; h. 80, d. 102. G6-484. XV, 4G. Baghdad.
144. Cup, hard brown ware, wet-smoothed, black wash over exterior; h. 52, d. 80. No field number. XV, 4M. No disposition.
145. Scoop, yellowish-green ware, bistre paint; h. 108, l. 252, w. 112. G7-201. XVI, 3-O. 38-13-133.
146. Pot, coarse light brown ware; h. 195, d. 234. No field number. XVI, 4J. Discarded.
147. Scoop, yellowish-green ware, bistre paint; h. 106, l. 256, w. 108. Below XV, 4S. 38-13-134.
148. Jar fragment, well-baked buff ware, wet-smoothed, bistre paint; ex. h. 104, d. 176. G6-480. XV, 4G. Baghdad.
149. Jar fragment, well-baked buff ware, wet-smoothed, bistre paint; ex. h. 80, d. 168. G6-481. XV, 4G. Baghdad.

PLATE CXXVI

150. Jar, light buff ware, red paint; h. 125, d. 145. G6-553. XV, 4-O. 37-16-364.
151. Jar, brown ware, wet-smoothed, bistre paint; h. 101, d. 114. G6-565. XV, 5M. Baghdad.
152. Jar, gritty buff ware, brown paint; h. 104, d. 138. G7-161. XVI, 6E. Baghdad.
153. Jar, hard green ware, fissured, bistre paint; h. 120, d. 132. G7-198. XVI, 3-O. 38-13-136.
154. Jar, grayish-green ware, dark brown paint; h. 66, d. 78. G7-138. Dump. Baghdad.
155. Jar, buff ware, brown paint; h. 73, d. 97. G7-204. XVI, 5E. Baghdad.
156. Jar, thick light brown ware; h. 72, d. 71. G6-555. XV, 4-O. Baghdad.
157. Jar, gritty light red ware, well-baked, lustrous red paint over exterior; h. 95, d. 98. G6-486. XV, 6G. 37-16-368.
158. Jar, coarse dark brown ware; h. 94, d. 98. G7-196. XVI, 3U. Baghdad.
159. Jar, brown ware, mottled brown and light green surfaces, bistre paint; h. 120, d. 102. G7-191. XVI, 4Q. 38-13-137.
160. Miniature pot, rough brown ware; h. 88, d. 70. G6-542. XV, 5-O. Baghdad.
161. Miniature jar, light brown ware, reddish-brown paint; h. 36, d. 55. G6-483. XV, 4G. 37-16-369.
162. Miniature jar, hard light brown ware, bistre paint; h. 53, d. 63. G6-573. XV, 4M. 37-16-370.
163. Miniature pot, reddish-brown ware; h. 42, d. 50. G6-583. XVI, 4-O. Baghdad.
164. Miniature pot, soft brown ware; h. 39, d. 45. G7-13. XVI, 5G. Baghdad.
165. Spoon (?) fragment, brown ware; h. 34, d. 50. G7-50. XVI, 4Q. 38-13-142.
166. Spouted miniature jar, rough gray ware; G7-118. XVI, 5E. 38-13-140.

PLATE CXXVII

167. Bowl, gritty brown ware, buff slip, red paint; h. 60, d. 97. G6-356. XIII, 5J. 37-16-224.
168. Bowl, well-baked brown ware, wet-smoothed, black paint; h. 66, d. 98. G6-263. XIII, 5M. Baghdad.
169. Bowl, buff ware, red paint; h. 96, d. 142. G6-551. XIII, 4-O. 37-16-234.
170. Bowl, well-baked light green ware, wet-smoothed; h. 100, d. 133. G6-406. XIII, 6G. 37-16-222.
171. Bowl, light green ware, large brown grits, wet-smoothed; h. 240, d. 330. G6-500. Be-

low XIII, 4J, Locus G36-157, grave. Discarded.

172. Bowl, buff ware, wet-smoothed, black paint; h. 230, d. 355. G6-357. XIII, 6J. Baghdad.
173. Bowl, light green ware, bistre paint; h. 120, d. 204. G7-332. XIII, 5M. 38-13-53.
174. Bowl, dark gray ware, wet-smoothed, pebble-burnished; h. 105, d. 200. G6-455. XIII, 5Q. Baghdad.
175. Bowl, brown ware, white grits, red paint; h. 92, d. 160. No field number. XIII, 4Q. 37-16-244.
176. Bowl, light brown ware, brown slip, burnished; h. 46, d. 208. G6-122. XIII, 5K. 37-16-241.
177. Bowl, mottled gray and red ware, wet-smoothed; h. 148, d. 276. G7-111. XIII Well. Discarded.
178. Bowl, coarse brown ware; h. 70, d. 142. G6-447. XIII, 4J, under Eastern Shrine. Baghdad.
179. Bowl, pink ware, light cream slip, bistre paint; h. 155, d. 400. G6-509. XIII, 6S. Baghdad.
180. Bowl, brown ware, traces of brown paint; h. 210, d. 300. G6-501. Below XIII, 5E, Locus G36-165, grave. Baghdad.
181. Bowl, sandy black ware, burnished; h. 62, d. 100. G6-373. XIII, 5J (Long Room of Eastern Shrine). 37-16-281.
182. Bowl, light grayish-green ware, black paint; h. 37, d. 111. G7-103. XIII Well. Baghdad (?).

PLATE CXXVIII

183. Bowl, buff ware, wet-smoothed, brown paint; ex. h. 70, d. 110. G6-409. XIII, 4-O. 37-16-232.
184. Bowl, light brown ware, brown slip, black paint; ex. h. 50, d. 110. No field number. XIII. No disposition.
185. Spouted bowl, brown ware, burnished red slip; h. 84, d. 170. G7-157. XIII Well. 38-13-62.
186. Spouted bowl, greenish-gray ware, black paint; h. 140, d. 191. G6-124. XIII, 5K. Baghdad.
187. Cup, well-baked light brown ware, wet-smoothed, red paint; h. 61, d. 86. G6-592. XIII, Baghdad.
188. Cup, light green ware, wet-smoothed, black paint; ex. h. 47, d. 80. No field number. XIII. 37-16-249.
189. Cup, well-baked thin brown ware, wet-smoothed, reddish-brown paint; h. 85, d. 73. G6-434. XIII, 4Q. 37-16-230.
190. Cup, hard buff ware, wet-smoothed, red paint;

ex. h. 65, d. 100. G6-491. XIII, 6S. 37-16-233.

191. Cup, greenish-gray ware, bistre paint; h. 70, d. 97. G6-445. XIII, 4J (pit in Eastern Shrine). 37-16-225.
192. Cup, greenish-gray ware, bistre paint; h. 45, d. 72. G7-158. XIII Well. Baghdad.
193. Cup, light green ware, wet-smoothed; h. 49, d. 72. G6-375. XIII, 5J (Long Room of Eastern Shrine). Baghdad.
194. Goblet (?), brown ware; h. 100, d. 100. G6-319. XIII, 5K. Baghdad.

PLATE CXXIX

195. Beaker, light reddish-brown ware, brown paint; h. 146, d. 182. G7-162. XIII Well. Baghdad.
196. Beaker, yellowish-green ware, bistre paint; h. 86, d. 80. G7-113. XIII Well. 38-13-61.
197. Beaker, well-baked brown ware, cream slip, black paint; h. 89, d. 93. G6-408. XIII, 4-O. 37-16-227.
198. Beaker, hard light green ware, wet-smoothed, bistre paint; h. 65, d. 78. G6-369. XIII, 5J. Baghdad.
199. Beaker, well-baked light buff ware, white slip on exterior, sepia paint; ex. h. 122, d. 130. G6-578. XIII. Baghdad.
200. Beaker, well-baked light green ware, wet-smoothed, bistre paint; ex. h. 94, d. 120. G6-468. XIII, 4M. Baghdad.
201. Beaker, brown ware, cream slip on exterior, black paint; ex. h. 150, d. 180. G6-442. XIII, 3J. 37-16-229.
202. Beaker, light brown ware, buff slip, sepia paint; h. 98, d. 95. G7-152. XIII, 6Q. Baghdad.

PLATE CXXX

203. Beaker, reddish-brown ware, light gray slip, brown paint; h. 222, d. 264. G7-237. XIII Well. Baghdad.
204. Beaker, well-baked buff ware, wet-smoothed, bistre paint; ex. h. 160, d. 180. G6-446. XIII, 4J (Pit in Eastern Shrine). Baghdad.
205. Beaker, hard light red ware, cream slip, bistre paint; ex. h. 165, d. 180. G6-471. XIII. 37-16-228.
206. Beaker, yellowish-green ware, bistre paint; ex. h. 132, d. 172. G7-187. XIII Well. 38-13-58.
207. Beaker, light yellow ware, bistre paint; h. 94, d. 100. G6-466. XIII. 37-16-226.
208. Beaker, brown ware, cream slip on exterior, black paint; h. 138, d. 176. G6-397. XIII (intrusive oven in Northern Temple). Baghdad.

209. Beaker, well-baked light green ware, wet-smoothed, black paint; h. 78, d. 105. G6-432. XIII, 37-16-231.
210. Jar, light brown ware, red paint; ex. h. 220, d. 360. G6-552. XIII, 3K. Baghdad.
211. Jar, brown ware; h. 66, d. 71. G6-399. XIII, 4-O. Baghdad.
212. Jar, well-baked reddish-brown ware, cream slip on exterior, black paint; ex. h. 190, d. 240. G6-411. XIII, 4-O. Baghdad.
213. Jar, hard brown ware, lighter brown slip, bistre paint; r. 145, d. 117. G5-1726. XIII, 4Q. 36-6-318.

PLATE CXXXI

214. Jar, flaky buff ware, black paint; h. 55, d. 88. G6-469. XIII, 4M. 37-16-238.
215. Jar, light brown ware, wet-smoothed, dark paint; h. 104, d. 124. G7-105. XIII Well. Baghdad.
216. Jar, brown ware, wet-smoothed, dark red paint; ex. h. 116, d. 200. G6-412. Below XIII, 4-O, Locus G36-148; grave. 37-16-239.
217. Jar, light brown ware, incised; h. 174, d. 173. G6-566. XIII, 6-O. Baghdad.
218. Jar, well-baked light green ware, incised; h. 176, d. 165. G6-384. XIII, 6G. Baghdad.
219. Jar, light green ware; h. 176, d. 134. G7-79. XIII Well. 38-13-65.
220. Jar, brown ware, buff slip, incised; h. 149, d. 140. G7-76. XIII, 6E. 38-13-52. (=Plate LXXVIIIc.)
221. Double-necked jar, mottled light brown ware; h. 225, d. 213. G7-160. XIII Well. Baghdad.
222. Spouted jar, gritty reddish-brown ware, mottled black and light red surfaces, wet-smoothed, faintly burnished; h. 250, d. 260. G6-353. XIII, 5J. Discarded.
223. Jar fragment, light brown ware, wet-smoothed, light brown paint; ex. h. 110. No field number. XIII, 4-O. No disposition.
224. Spouted jar, light green ware; h. 225, d. 245. G6-132. XIII, 5K. Baghdad.

PLATE CXXXII

225. Pot, light brown ware, red paint; h. 85, d. 61. G6-398. XIII, 5Q. 37-16-235.
226. Funnel, bitumen lined, light brown ware; h. 97, d. 240. G5-1662. XIII, 4Q. 36-6-314.
227. Drain pipe, buff ware; l. 111, d. 117. No field number. XIII, 5K. No disposition.
228. Incense burner, light brown ware, burning light red in spots, wet-smoothed, incised; ex. h. 200, d. 180. G6-360. XIII, 4J (Long Room of Eastern Shrine). 37-16-243. (=Plate LXXVIII.d.)

229. Bottle, poorly-baked brownish-black ware, fissured surfaces; ex. h. 127, d. 52. G6-361. XIII, 4Q. 37-16-236.
230. Drain pipe, brown ware; l. 362, d. 135. G6-401. XIII, 4M. Baghdad.
231. Pot with two compartments, well-baked reddish-brown ware, burnt sienna paint, bitumen applied to exterior; ex. h. 63, l. 77, w. 59. G6-393. XIII, 5G. 37-16-237.
232. Miniature bowl, light gray ware, dark brown paint; h. 23, d. 42. G7-108. XIII Well. Discarded.
233. Miniature pot, light brown ware; h. 30, d. 33. G6-454. XIII, 3-O. Baghdad.
234. Sherd; thick, hard light-green ware, wet-smoothed, appliqué and incised decoration; ex. h. 110. G6-425. XIII, 5Q. 37-16-242.

PLATE CXXXIII

235. Bowl, well-baked light green ware, white grits, bistre paint; h. 61, d. 111. G6-244. XII-A, 4M. 37-16-105.
236. Bowl, yellowish-green ware, buff slip; sepia paint; h. 58, d. 93. G6-282. XII-A, 3K. Baghdad.
237. Bowl, reddish-brown ware; h. 80, d. 184. G4-1140. XII 4-O (White Room). 35-10-195.
238. Bowl, light red ware, cream slip, black paint; h. 140, d. 305. G6-291. Below XII, 3M, Locus G36-66, grave. Baghdad.
239. Bowl, light brown ware, light yellowish-brown slip, color of paint not described; h. 93, d. 220. G5-1682. XII, 6Q. 36-6-227.
240. Bowl, coarse green ware, dark brown paint; h. 54, d. 178. G5-1740. XII, 4J. Baghdad.
241. Bowl, light green ware, bistre paint; h. 56, d. 140. G5-1709. XII, 6S. 36-6-233.
242. Dish, coarse red ware; h. 40, d. 196. G5-1663. XII, 4M. Baghdad.
243. Bowl, gritty brown ware, red slip, black paint; h. 40, d. 89. G6-589. XII, 11M, Baghdad.
244. Bowl, gritty brown ware, brick-red slip, black paint; h. 28, d. 64. G6-213. XII, 5H. 37-16-108.
245. Bowl, reddish-brown ware, red slip, burnished, black paint; h. 49, d. 105. G5-1388. XII, 4K. Baghdad.
246. Bowl, light green ware, wet-smoothed interior, black paint; h. 55, d. 135. G6-36. XII, 5Q. 37-16-102.
247. Bowl, light brown ware, wet-smoothed, faded black paint; h. 105, d. 246. G6-314. XII, 5M. Baghdad.

PLATE CXXXIV

- 248. Bowl, light red ware, light yellowish-green slip, black paint; h. 130, d. 295. G6-251. XII, 5M, Locus G36-62, grave. 37-16-110.
- 249. Bowl, red ware, cream slip, black paint; h. 135, d. 250. G6-456. Below XII, 6S Locus G36-154, grave. Baghdad.
- 250. Bowl, hard green ware, warped, black paint; h. 102, d. 252. G6-35. XII, 5Q, Locus G36-10, grave. 37-16-109.
- 251. Bowl, no description; no dimensions. G4-1144. XII, 5-O. Baghdad.
- 252. Bowl fragment, green ware, bistre paint. G7-272. XII, 7M. 38-13-33.
- 253. Bowl, buff ware, light yellowish-green slip, black paint; h. 120, d. 230. G6-311. Below XII, 4J. Baghdad.
- 254. Bowl, hard green ware; h. 125, d. 316. No. field number. XII, 6J. Discarded.
- 255. Bowl, red ware, greenish-gray slip; h. 95, d. 230. G6-18. XII, 4Q. 37-16-112.
- 256. Bowl, green ware, black paint; h. 74, d. 168. G6-316. Below XII, 5Q. 37-16-100.
- 257. Bowl, hard light brown ware, yellowish slip, black paint; h. 215, d. 300. G6-306. Below XII, 5K, Locus G36-107, grave.
- 258. Bowl, well-baked brown ware, greenish-gray slip on exterior; h. 130, d. 187. G6-120. XII, 5-O. 37-16-107.
- 259. Bowl, light green ware, wet-smoothed, black paint; h. 140, d. 200. G6-253. Below XII, 4K, Locus G36-61, grave. Baghdad.
- 260. Bowl, no description; h. 64, d. 200. G4-713. XII, 4Q. Baghdad.
- 261. Bowl, light reddish-brown ware; h. 60, d. 160. G5-1241. XII, 4M. 36-6-235.

PLATE CXXXV

- 262. Bowl, brown ware, wet-smoothed, dark brown paint; h. 170, d. 242. G6-259. Below XII, 4J, Locus G36-65, grave. 37-16-111.
- 263. Bowl, well-baked green ware wet-smoothed, black paint; h. 130, d. 200. G6-277. Below XII, 5K. Baghdad.
- 264. Bowl, green ware, wet-smoothed, black paint; h. 295, d. 428. G6-268. Below XII, 5K, Locus G36-70, grave. Baghdad.
- 265. Bowl fragment, hard green ware, black paint and modeled decoration; ex. 1 of animal, 93. G6-591. XII, 11M. 37-16-116.
- 266. Beaker, light green ware, black paint; h. 85, d. 93. G6-283. Below XII, 3M, Locus G36-94, grave. Baghdad.
- 267. Beaker, brown ware; h. 174, d. 147. G5-1618. XII, 6-O. 36-6-222.

- 268. Beaker, hard gritty brown ware, buff slip; h. 147 d. 156. G6-327. Below XII, 5J, Locus G36-126, grave. Baghdad.
- 269. Cup, greenish-gray ware, faded dark brown paint; h. 98, d. 118. G5-1584. XII, 4Q. Locus 255, grave. Baghdad.
- 270. Chalice, light green ware; h. 65, d. 84. G5-1745. XII, 3-O. 36-6-237.
- 271. Chalice, coarse red ware; h. 65, d. 146. G5-1758. XII, 4K. Philadelphia.
- 272. Cup, brown ware, wet-smoothed; h. 104, d. 136. G5-1568. XII, 6Q. Baghdad.

PLATE CXXXVI

- 273. Pot, well-baked green ware, black paint; h. 350, d. 355. G6-332. Below XII-A, 3K, Locus G36-101, grave. Baghdad.
- 274. Pot, coarse gray ware; h. 480, d. 600. G5-1752. Below XII, 4-O, Locus 310, grave. Discarded.
- 275. Pot, light brown ware, bistre paint; h. 312, d. 400. G5-1572. XII, 5Q, Locus 254, grave. 36-6-371.
- 276. Pot, reddish-brown ware, buff slip, red paint; h. 590, d. 540. G6-286. Below XII, 5M. Baghdad.
- 277. Pot, coarse light gray ware; h. 520, d. 520. G5-1718. Below XII, 4Q, Locus 294, grave. Baghdad.
- 278. Pot, well-baked green ware, black paint; h. 425, d. 400. G6-269. Below XII, 4K, Locus G36-71, grave. Baghdad.
- 279. Pot, green ware, light buff slip, black paint; ex. h. 488, d. 485. G6-261. Below XII, 4M, Locus G36-63, grave. Discarded.
- 280. Pot, light greenish-buff ware, wet-smoothed, bistre paint; h. 485, d. 480. G6-339. Below XII, 5J, Locus G36-131, grave. 37-16-89. (=Plate LXXIX.e.)

PLATE CXXXVII

- 281. Pot, coarse light green ware, black paint; h. 335, d. 314. G5-1757. XII, 4M. Baghdad.
- 282. Pot, light brown ware; h. 216, d. 296. G5-1685. Below XII, 4-O, Locus 291, grave. 36-6-376.
- 283. Pot, no description; h. 280, d. 400. G4-1231. XII, 5M. Discarded.
- 284. Pot, buff ware, dark brown paint; h. 512, d. 536. G5-1686. Below XII, 5S, Locus 287, grave. Baghdad.
- 285. Pot, light red ware, buff slip, brown paint; h. 385, d. 430. G6-138. Below XII, 5M, Locus G36-25, grave. Discarded.
- 286. Pot, buff ware, cream slip, dark brown paint;

- h. 226 d. 260. G5-1728. Below XII, 4M, Locus 307, grave. Baghdad.
287. Pot, well-baked light green ware, black paint; h. 250, d. 330. G6-270. Below XII, 4M, Locus G36-69, grave. Baghdad.
288. Pot, brown ware, pale green slip on exterior, dark brown paint; h. 230, d. 315. G6-235. XII, 5Q, Locus G36-51, grave. Baghdad.
289. Pot, reddish-brown ware, light cream slip on exterior, sepia paint; h. 320, d. 380. G6-499. Below XII, 6S. Baghdad.
290. Pot, coarse green ware; h. 275, d. 350. G5-1754. Below XII, 4M, Locus 308, grave. Discarded.
291. Pot, black ware, mottled black and dark brown slip on exterior, lightly polished; h. 230, d. 280. G6-45. XII, 5Q, Locus G36-9, grave. Baghdad.
292. Pot, light green ware, wet-smoothed, sepia paint; h. 258, d. 295. G6-255. Below XII, 3M, Locus G36-59. 37-16-91.
293. Pot, coarse black ware, mottled black and brown slip on exterior; h. 280, d. 310. G5-1693. XII, 5S. 36-6-217.
294. Pot fragment, well-baked gritty brown ware, red slip on exterior, black paint; ex. h. 72, d. 140. G6-594. XII, 4S. 37-16-117.
295. Pot fragment, hard gritty brown ware, red slip on exterior, bistre paint; ex. h. 87, d. 320. G6-618. XII, 11M. Baghdad.

PLATE CXXXVIII

296. Spouted pot, brown ware, dark brown paint; d. 375, h. 290. G6-38. XII, 5Q, Locus G36-8, grave. Baghdad.
297. Spouted pot, lightly burnished buff ware; h. 150, d. 216. G6-252. Below XII, 4K, Locus G36-61, grave. Baghdad.
298. Spouted pot, gritty black ware, red slip on exterior, roughly burnished; h. 290, d. 300. G5-1611. XII, 6S, Locus 259, grave. 36-6-373.
299. Spouted pot, gritty black ware, lustrous dark brown slip on exterior; h. 208, d. 236. G5-1761. Below XII, 5S, Locus 321, grave. Discarded.
300. Jar, green ware, wet-smoothed, incised; ex. h. 385, d. 430. G6-338. Below XII, 6K, Locus G36-99, grave. Baghdad.
301. Jar, light green ware; h. 260, d. 308. G6-322. Below XII, 3K, Locus G36-119, grave. Baghdad.
302. Jar, buff ware, incised; h. 245, d. 235. G6-121. Below XII, 4K, Locus G36-23, grave. Baghdad.
303. Jar, light brown ware; h. 320, d. 320. G5-1569. XII, 6Q, Locus 230, grave. Discarded.
304. Jar, red ware, red paint; h. 420, d. 425. G5-1763. Below XII, 4M, Locus 317, grave. Baghdad.
305. Jar, green ware, wet-smoothed, black paint; ex. h. 370, d. 420. G6-336. Below XII, 5J, Locus G36-124, grave. Discarded.
306. Jar, buff ware, wet-smoothed, dark brown (originally red) paint; h. 440, d. 405. G6-254. XII, 6M, Locus G36-57, grave. Baghdad.

PLATE CXXXIX

307. Jar, light green ware, bistre paint; h. 384, d. 384. G4-1145. XII, 5-O. 35-10-199.
308. Jar well-baked light brown ware, red slip, black paint; h. 440, d. 450. G6-279. XII, 6K, Locus G36-77, grave. Baghdad.
309. Jar, hard light green ware, wet-smoothed, dark brown (originally red?) paint; h. 460, d. 540. G6-155. Below XII, 4K, Locus G36-29, grave. Baghdad. (=Plate LXXVIII.a and b.)
310. Jar, well-baked gritty red ware, brown slip, black paint; h. 96, d. 103. G6-201. XII, 5K. Baghdad.
311. Jar, hard gritty brown ware, red slip on exterior, bistre paint; h. 96, d. 125. G6-588. XII, 11M. 37-16-94.

PLATE CXL

312. Jar, fine red ware, pebble-burnished; h. 137, d. 158. G5-1623. XII, 6K. Baghdad.
313. Jar, light green ware, bistre paint; h. 100, d. 103. G6-355. Below XII, 4G. 37-16-223.
314. Jar, dark gray ware, pebble-burnished; h. 116, d. 168. G5-1660. Below XII, 4-O. Baghdad.
315. Jar, coarse green ware, reddish-brown paint; h. 71, d. 84. G5-1723. Below XII, 4Q, Locus 301, grave. Baghdad.
316. Jar, rough brown ware; h. 80, d. 95. G5-1553. XII, 5M, Locus 250, grave. 36-6-370.
317. Jar, well-baked buff ware, black paint; h. 178, d. 167. G6-307. Below XII, 3M. 37-16-95.
318. Bottle, brown ware, red wash, incised; h. 74, d. 56. G6-301. Below XII, 5M. 37-16-97.
319. Funnel, buff ware; h. 75, d. 242. G6-72. Below XII, 6M. Baghdad.
320. Funnel, no description; h. 120, d. 332. G4-1230. XII, 5M. Discarded.
321. Bottle, rough brown ware; h. 105, d. 83. G5-1523. XII, 5M, Locus 236, grave. 36-6-365.
322. Miniature jar, hard green ware; h. 51, d. 60. G6-310. Below XII, 4J. Baghdad.
323. Miniature pot, poorly-baked rough brown

ware; h. 112, d. 95. G6-245. Below XII, 5M. Baghdad.

324. Miniature jar, brown ware; h. 35, d. 33. G6-205. XII, 5M. 37-16-113.
 325. Funnel, coarse light brown ware; h. 220, d. 228. G5-1665. XII, 4-O. Baghdad.
 326. Pot, light green ware, wet-smoothed; l. 225, h. 143. G6-392. Below XII, 6G. Baghdad.
 327. Miniature bowl, light brown ware, traces of bistre paint; h. 28, d. 63. G5-1436. XII, 4-O. 36-6-241.

PLATE CXXI

328. Bowl, coarse reddish-buff ware; h. 51, d. 174. G5-1620. XI-A, 5M. Baghdad.
 329. Bowl, brown ware; h. 220, d. 365. G6-115. XI-A, 4J. Baghdad.
 330. Bowl, no description; h. 56, d. 160. G4-921. XI-A, 5-O. Discarded.
 331. Bowl, coarse black ware, ground shell tempering material, pebble-burnished; h. 80, d. 148. G5-1644. XI-A, 8M. 36-6-135.
 332. Bowl, red ware; h. 52, d. 142. G5-1490. XI-A, 6S. Baghdad.
 333. Bowl, light red ware, wet-smoothed; h. 120, d. 210. G5-1486. XI-A, 5K. Baghdad.
 334. Bowl, light brown ware; h. 56, d. 102. G6-106. XI-A, 4J. Baghdad.
 335. Bowl, light buff ware, wet-smoothed; h. 140, d. 300. No field number. XI-A, 7M (Round House). No disposition.
 336. Bowl, greenish-gray ware, wet-smoothed; h. 42, d. 98. G5-1505. XI-A, 5S. 36-6-134.
 337. Bowl, good buff ware, red slip; h. 88, d. 210. G5-1549. XI-A, 5K. Baghdad.
 338. Bowl, buff ware; h. 90, d. 132. G5-1495. XI-A, 4K. 36-6-137.
 339. Bowl, buff ware, wet-smoothed, dark brown paint; h. 106, d. 196. G5-1487. XI-A, 5K. Baghdad.
 340. Spouted bowl, no description; h. 90, d. 170. G4-1117. XI-A, 4-O. 35-10-145.
 341. Spouted bowl, reddish-brown ware, white grits; h. 100, d. 164. G5-1468. XI-A, 6S. 36-6-138.
 342. Spouted bowl, light gray-green ware, appliqué pellets on spout, incised; h. 88, d. 162, l. of spout 130. G5-1503. XI-A, 5Q. Baghdad. (=Plate LXXIX.c.)

PLATE CXXII

343. Spouted pot, dark gray ware, red slip, burnished; h. 352, d. 452. G5-1443. XI-A, 4J, Locus 175, grave. Discarded.
 344. Pot, mottled gray and brown ware, faintly burnished; h. 154, d. 220. G4-1165. XI-A, 5M. 35-10-138.

345. Pot, grayish-green ware, wet-smoothed, dark reddish-brown paint; h. 170, d. 220. G5-1475. XI-A, 5S. Baghdad.

346. Double-rimmed pot, coarse buff ware, wet-smoothed; h. 256, d. 496. G5-1444. XI-A, 5J. Baghdad.
 347. Pot, no description; h. 240, d. 280. G4-1227. XI-A, 5M. Locus 164, grave. Baghdad.
 348. Pot, well-baked light green ware; h. 113, d. 162. G6-94. XI-A, 4J. Baghdad.
 349. Jar, reddish-buff ware, wet-smoothed; h. 352, d. 392. G5-1442. XI-A, 5K. Discarded.
 350. Jar, reddish-brown ware; h. 480, d. 464. G5-1571. XI-A, 7K. Discarded.
 351. Jar, coarse red ware, wet-smoothed; h. 336, d. 342. G5-1423. XI-A, 4J. Discarded.
 352. Jar, light green ware; h. 70, d. 84. G4-1094. XI-A, 6Q. 35-10-139.
 353. Jar, well-baked brown ware, buff slip on exterior, black paint; h. 167, d. 182. G6-100. XI-A, 4K. Baghdad.
 354. Jar, drab brown ware; h. 132, d. 148. G5-1525. XI-A, 7K. 36-6-139.

PLATE CXXIII

355. Jar, light green ware; h. 90, d. 103. G6-87. XI-A, 4J. 37-16-50.
 356. Double-necked jar, dark grayish-brown ware, dark red slip; h. 196, d. 200. G5-1340. XI-A, 7M. Baghdad.
 357. Jar, greenish-gray ware, dark brown paint; h. 103, d. 75. G5-1446. XI-A, 5J. Baghdad.
 358. Jar, hard light green ware, wet-smoothed; h. 102, d. 132. G6-317. XI-A, 6J. Baghdad.
 359. Jar, hard brown ware, white grits, thin brown wash on exterior burning red and gray; h. 110, d. 128. G5-1482. XI-A, 5Q. 36-6-138.
 360. Strainer, light buff ware; ex. h. 336, d. 222. G5-1339. XI-A, 6G. Baghdad.
 361. Miniature cup, hard black ware; h. 42, d. 71. G6-313. XI-A, 6J. Baghdad.
 362. Miniature jar, brown ware; h. 43, d. 44. G5-1397. XI-A, 4K. 36-6-144.
 363. Drain pipe, coarse brown ware; h. 213, d. 182. G6-104. XI-A, 5J. Baghdad.
 364. Lamp (?), well-baked grayish-green ware; l. 86, w. 52, h. 16. G6-78. XI-A, 5K. 37-16-52.
 365. Jar stand, reddish-buff ware, red slip, burnished; h. 160, d. 392. G5-1516. XI-A, 4K. Discarded.
 366. Funnel, light brown ware; h. 42, d. 114. G6-88. XI-A, 4J. Baghdad.

PLATE CXXIV

367. Bowl, no description; h. 80, d. 280. G4-959. XI, 7-O. Discarded.

368. Bowl, coarse reddish-brown ware; h. 75, d. 290. G3-104. IX, 10-M. 33-3-52.
369. Bowl, no description; h. 112, d. 296. G4-804. XI, 6-O. Discarded.
370. Bowl coarse reddish-brown ware; h. 92, d. 332. G4-633. XI, 6-O, Locus 100, grave. Baghdad.
371. Bowl, coarse buff ware; h. 80, d. 240. G3-248. IX, 9-O. 33-3-122.
372. Bowl, no description; h. 144, d. 280. G4-764. XI, 6M. Baghdad.
373. Bowl, light brown ware, dark gray slip, incised line; h. 80, d. 190. G4-670. XI, 6Q. 35-10-28.
374. Bowl, grayish-brown ware; h. 84, d. 260. G3-251. IX, 10-S. Discarded.
375. Bowl, light brown ware, reddish-brown paint; h. 89, d. 261. G6-44. X-A, 8M. Baghdad.
376. Bowl, fine buff ware; h. 100, d. 160. G4-864. XI, 4J (Temple). No disposition.
377. Bowl (?), light brown ware, impressed; h. 62, d. 120. G4-898. XI, 6-O. 35-10-26. (=Plate LXXIX.d.)
378. Bowl, black ware burnt yellow; h. 208, d. 376. G3-224. IX, 9-O. Baghdad.
379. Bowl, buff ware, reddish-brown slip; h. 95, d. 160. G5-1366. XI, 3K. 36-6-45.
380. Bowl, dark brown ware, wet-smoothed; h. 67, d. 140. G5-1272. X-A (?), 5G. Baghdad.
381. Bowl, wheel-made, greenish-gray ware; h. 92, d. 180. G3-366. IX, 7-8Q. 33-3-180.
382. Bowl, hard green ware; h. 80, d. 184. G4-732. XI, 5M. Discarded.
383. Bowl, brown ware, dark brown paint; h. 150, d. 355. G6-60. X-A, 8M. Baghdad.
384. Bowl, red ware, gray slip; h. 100, d. 255. G3-336. X, 7Q. Baghdad.

PLATE CXLV

385. Cup, fine reddish-brown ware, incised; h. 90, d. 130. G4-833. XI, 6Q. 35-10-29.
386. Cup, well-baked light red ware, buff slip, incised; h. 90, d. 112. G6-158. Below X-A, 8-O. Baghdad.
387. Cup, light buff ware, wet-smoothed, incised; h. 68, d. 102. G5-1319. X-A, 6-7M. 36-6-22.
388. Cup, fine light greenish-gray ware, incised; h. 84, d. 108. G4-632. XI, 5-O. Baghdad.
389. Cup, light green ware; h. 66, d. 78. G4-798. X, 5J. 35-10-1.
390. Cup, no description, incised; h. 74, d. 78. G4-854. XI, 7Q. Baghdad.
391. Spouted (?) cup, fine light red ware, incised; h. 80, d. 118. G4-811. XI, 4J, Temple. Baghdad.

392. Beaker, light greenish-gray ware; h. 100, d. 150. G5-1404. XI, 7M. Baghdad.
393. Beaker, no description, punctured; h. 96, d. 134. G4-900. XI, 6-O. Baghdad.
394. Beaker, buff ware; h. 66, d. 89. G5-1264. X-A, 6G. 36-6-1.
395. Beaker, light buff ware, dark brown paint; h. 220, d. 272. G4-803. X, 10-J. Baghdad.
396. Beaker, buff ware, light green slip, brown paint; h. 110, d. 132. G3-41. IX, 6K. Baghdad.
397. Beaker, light greenish-gray ware; h. 112, d. 148. G4-703. X, 6-O. Baghdad.
398. Beaker, fine light-brown ware, color of paint not described; h. 170, d. 204. G5-492. X, 5M. Baghdad.

PLATE CXLVI

399. Chalice, poorly-baked brown ware; h. 64, d. 86. G6-55. XI, 8S. Baghdad.
400. Chalice, red ware; h. 175, d. 182. G3-313. IX, 11K. 33-3-150.
401. Chalice, reddish-brown ware; h. 60, d. 97. G4-1038. XI, 5-O. 35-10-142.
402. Pot, light buff ware, dark brown slip; h. 272, d. 335. G5-1369. XI, 5K, (against wall of temple). Discarded (?).
403. Pot, coarse buff ware, wet-smoothed; h. 231, d. 312. G5-1323. XI, 6J, Locus 215, grave. Discarded.
404. Pot, no description; h. 308, d. 308. No field number. X-A, 6J. No disposition.
405. Double-rimmed pot, gritty brown ware, dark brown wash on both surfaces, trickles of white wash on exterior; h. 365, d. 535. G6-165. XI, 8Q. Discarded.
406. Double-rimmed pot, coarse brown ware, burnt black in spots; h. 480, d. 530. G3-71. IX, 6J. 33-3-36.
407. Double-rimmed pot, hard gritty brown ware, gray slip; h. 71, d. 125. G6-326. Below XI, 7S, Locus G36-129, grave. Baghdad.
408. Pot, well-baked gritty brown ware, light grayish-yellow slip on exterior, brown paint; h. 177, d. 250. G6-58. XI, 6K. Baghdad.
409. Pot, reddish-brown ware, traces of cream slip; h. 185, d. 230. G3-252. IX, 9Q. 33-3-124.
410. Spouted pot buff ware; h. 170, d. 220. G3-370. X, 11K. 33-3-183.

PLATE CXLVII

411. Spouted pot, coarse light brown ware; h. 303, d. 380. G3-137. IX, 8-O. 33-3-63.
412. Pot, buff ware, reddish-brown paint; h. 128, d. 187. G5-1613. X-A, 7-O. Baghdad.

413. Pot, rough brown ware; h. 252, d. 316. G5-1570. XI, 7M. Discarded.
414. Pot, no description; h. 750, d. 810. G5-1373. XI, 6J. Discarded.
415. Pot, fine light brown ware; h. 86, d. 116. G3-494. X, 5J. Discarded.
416. Pot, wheel-made, buff ware; h. 120, d. 155. G3-134. IX, 9Q. 33-3-67.
417. Pot, no description; h. 304, d. 400. G4-941. XI, 6M, Locus 126, grave. Discarded.
418. Jar, light brown ware, light brown slip; h. 108, d. 122. G4-786. XI, 4K. Baghdad.
419. Jar, hard light brown ware, white grits; h. 85, d. 96. G6-557. XI, 11M. 37-16-32.
420. Jar, reddish-brown ware, gray slip; h. 102, d. 128. G4-846. XI, 7-O. Baghdad.
421. Jar, wheel-made, buff ware, traces of cream slip; h. 113, d. 132. G3-21. IX, 7-O. 33-3-10.
422. Jar, dark gray ware, faintly burnished; h. 103, d. 125. G3-227. IX, 10-Q. 33-3-12.
423. Jar, dull light brown ware, cream slip, traces of dark red paint; h. 90, d. 108. G4-734. XI, 6-O. Baghdad.
424. Jar, deep buff ware, brown slip; h. 90, d. 110. G3-355. X, 11K. 33-3-170.
425. Jar, light greenish-buff ware; h. 120, d. 140. G3-318. IX, 6Q. Baghdad.
426. Jar, coarse dark gray ware, red slip; h. 110, d. 142. G4-869. XI, 4J. 35-10-27.
427. Jar, fine black ware; h. 101, d. 121. G3-133. IX, 10-O. Baghdad.
428. Jar fragment, greenish-gray ware, incised; ex. h. 75. G3-101. IX, 8M. Baghdad.

PLATE CXLVIII

429. Jar, coarse reddish-brown ware, cream slip, color of paint not described; h. 320, d. 375. G5-1473. X-A, 7M. Locus 190, grave. Discarded.
430. Jar, buff ware, red slip; h. 85, d. 93. G5-1318. X-A, 6K. 36-6-23.
431. Jar, light gray ware, wet-smoothed; h. 304, d. 328. G5-1299. Below X-A, 5J, Locus 206, grave. Discarded.
432. Jar, red ware, light brown slip; ex. h. 530, d. 250. G6-114. X-A, 8K. Baghdad.
433. Jar, reddish-brown ware, buff slip, black paint; h. 150, d. 175. G6-33. X-A, 8M. Baghdad.
434. Double-necked jar fragment, buff ware, wet-smoothed; ex. h. 136. G5-1286. XI, 5J. 36-6-54.
435. Incense burner, coarse brown ware; h. 705, d. 440. G7-66. XI, 8M. Baghdad.
436. Funnel, reddish-buff ware, wet-smoothed; h. 124, d. 300. G5-1315. XI, 6J. Baghdad.
437. Funnel, light green ware, incised; h. 105, d. 266. G6-140. XI, 8Q. Baghdad.
438. Drain pipe, no description; h. 300, d. 184. G4-1009. XI, 4-O. Baghdad.
439. Ladle fragment, light gray ware, bowl; h. 90, d. 145. G5-1616. X-A, 7-O. Baghdad.
440. Miniature bowl, dark brown ware; h. 28, d. 80. G3-1304. XI, 6J. Baghdad.
441. Miniature bowl, red ware; h. 27, d. 45. G3-198. IX, 10-M. 33-3-94.
442. Miniature jar, no description; h. 49, d. 49. G4-1011. XI, 6Q. Baghdad.
443. Miniature jar, light brown ware; h. 55, d. 54. G6-593. XI, 6Q. Baghdad.

PLATE CXLIX

444. Sherd, grayish-green ware; brown paint. G7-250. XVI. Baghdad.
445. Sherd, buff ware; reddish-purple paint. XVI, 5G.
446. Sherd (rim fragment of a pot?), yellowish-green ware; bistre paint. G7-28. XVI, 5G. 38-13-139.
447. Sherd (shoulder fragment of a small jar), light yellow ware; brown paint. XV, 3M. 37-16-373.
448. Sherd (shoulder fragment of a jar), hard, fine light red ware, buff slip on exterior; bistre paint. XVI, 4J.
449. Sherd (rim fragment of a cup), light yellowish-green ware; bistre paint. XV, 6G. 37-16-377.
450. Sherd (rim fragment of a bowl), light green ware, wet-smoothed; bistre paint. XV, 4K. 37-16-375.
451. Sherd (rim fragment of a large jar), coarse, thick brown ware; red paint. XVI, 4J.
452. Sherd, well-baked yellowish-brown ware; bistre paint. XV, 5J.
453. Sherd (rim fragment of a beaker?), hard drab brown ware; black paint. XVI, 4J. 37-16-397.
454. Sherd, light red ware, cream slip on exterior; faded bistre paint. XV. 37-16-372.
455. Sherd, grayish-green ware; black paint. XVI, 3K.
456. Sherd, light grayish-green ware; dark brown paint. XVI, 3M.
457. Sherd, no description. XVI, 5G.
458. Sherd (shoulder fragment of a jar), light brown ware, wet-smoothed; bistre paint. XV, 3K.
459. Sherd, no description. XVI, 5G.

PLATE CL

- 460. Sherd, greenish-gray ware, wet-smoothed; black paint. XIII.
- 461. Sherd, hard red ware, thin buff slip; thick black paint. Below XIII, 5G.
- 462. Sherd, well-baked buff ware, wet-smoothed; black paint. XIII. 37-16-263.
- 463. Sherd (rim fragment of a bowl), hard light red ware, buff slip; black paint. XIII, 5G. 37-16-247.
- 464. Sherd, light brown ware, thin cream slip; burnt sienna paint. XIII.
- 465. Sherd, buff ware, wet-smoothed; bistre paint. XIII, 6J.
- 466. Sherd, buff ware, wet-smoothed; bistre paint. XIII, 5G. 37-16-270.
- 467. Sherd, light brown ware, wet-smoothed; black paint. XIII, 4K.
- 468. Sherd, light green ware, wet-smoothed; black paint. XIII, 5J.
- 469. Sherd (fragment of a large jar or pot), light green ware, red paint. Below XIII, 37-16-250.
- 470. Sherd (rim fragment of a large cup or beaker), light green ware; bistre paint. Below XIII, 5G.
- 471. Sherd (rim fragment of a beaker?), hard green ware, wet-smoothed; black paint. XIII, 5Q. 37-16-255.
- 472. Sherd, hard light green ware, wet-smoothed; black paint. XIII, 4-O.
- 473. Sherd (rim fragment of a bowl or pot), hard red ware, cream slip on exterior; black paint. XIII, 6G.
- 474. Sherd, buff ware, thin cream slip; black paint. XIII, 4K.
- 475. Sherd, light buff ware, wet-smoothed; brown paint. XIII. 37-16-267.
- 476. Sherd (shoulder fragment of a jar), hard reddish-brown ware, wet-smoothed; dark red paint. XIII, 5Q.
- 477. Sherd (rim fragment of a bowl), hard green ware; black paint. XIII. 37-16-260.
- 478. Sherd, hard brown ware, cream slip on exterior; dark reddish-brown paint. XIII, 4-O.
- 479. Sherd, light green ware, wet-smoothed; black paint. XIII.
- 480. Sherd (shoulder fragment of a jar), hard, gritty brown ware, cream slip on exterior; reddish-purple paint. XIII, 5-O.
- 481. Sherd, light buff ware, wet-smoothed; black paint. XIII.
- 482. Sherd, buff ware, wet-smoothed; black paint. XIII, 4J. 37-16-272.
- 483. Sherd, good light brown ware, thin cream slip; black paint. XIII, Temple Court.

- 484. Sherd, fine light red ware, wet-smoothed; black paint. XIII, 5J. 37-16-261.
- 485. Sherd, light red ware, cream slip; black paint. XIII.
- 486. Sherd, light brown ware, thin cream slip; bistre paint. XIII.
- 487. Sherd, light green ware; black paint. XIII, 5G.

PLATE CLI

- 488. Sherd, light green ware, wet-smoothed; black paint, incised. XIII.
- 489. Sherd, hard, gritty light-red ware, brown slip inside, wet-smoothed outside; black paint. XIII. 37-16-251.
- 490. Sherd, drab light brown ware; black paint. XIII, Temple Court. 37-16-252.
- 491. Sherd, brown ware, cream slip; burnt sienna paint. XIII, 4J.
- 492. Sherd, light buff ware, wet-smoothed; black paint. XIII. 37-16-275.
- 493. Sherd (rim fragment of a cup or beaker?), light brown ware, wet-smoothed exterior; bistre paint. Below XIII, 6G.
- 494. Sherd, fine thin light red ware, cream slip; red paint. XIII, 4J.
- 495. Sherd (rim fragment of a pot?), light green ware, wet-smoothed; black paint. XIII. 37-16-254.
- 496. Sherd, light brown ware, wet-smoothed; black paint. XIII.
- 497. Sherd (rim fragment of a pot), brown ware, white grits, thin cream slip; dark brown paint. XIII, Temple Court. 37-16-253.
- 498. Sherd, brown ware, wet-smoothed; brown paint. XIII, 37-16-274.
- 499. Sherd, poorly-baked buff ware, wet-smoothed; black paint. XIII, 4J.
- 500. Sherd (fragment of a beaker), light greenish-gray ware, wet-smoothed; red and black paint. G6-577. XIII. Baghdad.
- 501. Sherd (rim fragment of a pot), light green ware, wet-smoothed; black paint. XIII, 4-O. 37-16-259.
- 502. Sherd, light yellow ware, wet-smoothed; black paint. XIII, Temple Court. 37-16-257.
- 503. Sherd, well-baked thin brown ware, wet-smoothed; black paint. XIII, 6G. 37-16-266.
- 504. Sherd, light green ware, wet-smoothed; black paint. XIII, 5G.
- 505. Sherd, green ware, wet-smoothed; black paint. XIII, 5G. 37-16-269.
- 506. Sherd, light green ware, wet-smoothed; dark reddish-black paint. XIII (?).
- 507. Sherd (rim fragment of a cup or pot?), light

yellowish-green ware, wet-smoothed; bistre paint. Below XIII, 6G. 37-16-248.

508. Sherd, reddish-brown ware, light brown slip; black paint. XIII, 5-O. 37-16-273.

509. Sherd, light brown ware, thin cream slip on interior, wet-smoothed exterior; bistre paint. XIII, 5J.

510. Sherd (shoulder fragment of a jar), light red ware, buff slip on exterior; bistre paint. Below XIII, 5G. 37-16-245.

511. Sherd (rim fragment of a bowl), hard pink ware, buff surfaces, wet-smoothed; black paint. XIII, 6G. 37-16-264.

512. Sherd, light green ware, wet-smoothed; black paint. XIII (?).

513. Sherd, well-baked light green ware, wet-smoothed; burnt sienna paint. XIII (?).

PLATE CLII

514. Sherd (fragment of a beaker), no description; impressed. XI, 5-O.

515. Sherd (fragment of a beaker?), well-baked buff ware; incised and impressed. G6-39. X-A, 7K. 37-12-22.

516. Sherd (fragment of a beaker), gray ware, gray slip; impressed. G5-1252. X-A (?), 5J. Baghdad.

517. Sherd (fragment of a beaker), no description; incised. XI, 6-O.

518. Sherd (fragment of a beaker), no description; incised. G4-993. XI, 4-O. 35-10-51.

519. Sherd (fragment of a beaker), light brown ware, wet-smoothed; punctured. G4-627. XI, 5-O. 35-10-25.

520. Sherd, no description; incised. XI, 5K.

521. Sherd (jar fragment), buff ware, cream slip; red paint. G3-154. IX, 8Q. 33-3-72.

522. Sherd, no description of ware or paint. G4-1091. XI, 6M. Baghdad.

523. Sherd (jar fragment), grayish-buff ware; dark brown paint. G3-344. X, 11K. 33-3-162.

524. Sherd (jar fragment), brown ware, cream slip; red paint. G3-229. IX, 8-O. 33-3-114.

525. Fragment of a jar, fine red ware, cream slip; no description of paint. G3-368. X, 11K. Baghdad.

PLATE CLIII

1. Female figurine, terra cotta, black and brown paint; h. 84, w. 35. G6-159. Northeast Base. 37-16-406. (=Plate LXXXI.a.)

2. Female figurine, terra cotta, incised; h. 73, w. 42. G6-362. Area A, Level B. Baghdad.

3. Female figurine, terra cotta, brown paint; h. 83, w. 41. G7-213. XVII, 5J. 38-13-500. (=Plate LXXXI.b.)

4. Female figurine, terra cotta, brown paint; h. 77, w. 45. G7-279. XVII, 4J. Baghdad. (=Plate LXXXI.c.)

5. Female figurine, terra cotta; h. 42, w. 27, t. 13. G7-496. XIX, 3K. Baghdad.

6. Female figurine, terra cotta, red paint; ex. h. 52, w. 28. G6-570. XV, 3-O. 37-16-382.

7. Female figurine (?), terra cotta; h. 73, d. 57. G6-510. XV, 4J. 37-16-385.

8. Female figurine, terra cotta; ex. h. 53, w. 38. No field number. XIII, 5-O. No disposition.

9. Female figurine, terra cotta; ex. h. 38, ex. w. 32. G4-905. XI-A, 5M. 35-10-147.

10. Male figurine, terra cotta; ex. h. 57, w. 30. G6-179. X, 8J. Baghdad.

11. Foot, sun-baked clay; l. 242, w. 111, h. 135. G6-131. XI-A, 3K. Discarded.

PLATE CLIV

12. Animal figurine, terra cotta; l. 60, h. 40. G7-297. Below XVII, 5G, Locus 7-37, grave. 38-13-517. (=Plate LXXXII.b, No. 2.)

13. Animal head from vessel, terra cotta, traces of red paint; ex. h. 58. G7-355. XVIII, 4K. 38-13-729.

14. Animal figurine, terra cotta; h. 40, l. 56. No field number. XV, 6G. 37-16-380.

15. Animal figurine, terra cotta, black paint; h. 48, l. 59. G6-477. XV, 4K. 37-16-381.

16. Animal's foot, terra cotta, dark brown paint; h. 65. G7-292. XIII, 6-O. Baghdad.

17. Animal figurine, terra cotta; l. 43, h. 32. G6-372. XIII, 6Q. Baghdad.

18. Animal figurine, terra cotta; l. 48, h. 40. G6-321. XII-A, 3J. 37-16-220.

19. Animal figurine, terra cotta; l. 37, h. 20. G6-31. XII, 5S. Baghdad.

20. Animal figurine, terra cotta; l. 49, h. 39. G4-1062. XI-A, 5M. Baghdad.

21. Animal figurine, terra cotta, black paint; l. 57, h. 37. G6-50. XI, 8Q. 37-16-34.

22. Spout in form of animal's head, terra cotta, brown paint; ex. h. 61, ex. w. 43. G4-1105. XI-A, 6S. Baghdad.

PLATE CLV

23. Hammer-shaped object, terra cotta, light green (original bistre?) paint; l. 59, d. 25. G6-485. XV, 4G. 37-16-384.

24. Spindle whorl, terra cotta; d. 50, h. 27. G7-46. XVI, 5K. Baghdad.

25. Spindle whorl, terra cotta, incised; d. 34, h. 18. G7-70. XVI, 3J. Baghdad.

26. Spindle whorl, terra cotta, incised; d. 40, h. 22. No field number. XIII. No disposition.

27. Spindle whorl, terra cotta, incised; d. 35, h. 25. No field number. XIII. No disposition.
28. Spindle whorl, terra cotta, incised; d. 27, h. 23. No field number. XIII. No disposition.
29. Spindle whorl, terra cotta, punctured; d. 34, h. 18. No field number. XIII. No disposition.
30. Spindle whorl, terra cotta, incised; d. 36, h. 25. No field number. XIII. No disposition.
31. Spindle whorl, terra cotta, incised; d. 36, h. 17. No field number. XIII. No disposition.
32. Spindle whorl, terra cotta; d. 41, h. 26. G4-610. XIII, 5-O. Baghdad.
33. Spindle whorl, terra cotta, appliqué; d. 40, h. 25. G6-4. XII, 5Q. Baghdad.
34. Spindle whorl, terra cotta; d. 33, h. 19. G4-677. XII, 4Q. Baghdad.
35. Spindle whorl, terra cotta; d. 31, h. 13. G4-677. XII, 4Q. Baghdad.
36. Spindle whorl, terra cotta, incised; d. 36, h. 18. G4-677. XII, 4Q. Baghdad.
37. Spindle whorl, terra cotta, incised; d. 42, h. 23. G4-677. XII, 4Q. Baghdad.
38. Spindle whorl, terra cotta, incised and punctured; d. 36, h. 18. G5-1596. XII, 4J. Baghdad.
39. Spindle whorl, terra cotta, incised; d. 40, h. 21. G4-1049. XI-A, 6-O. 35-10-150.
40. Spindle whorl, terra cotta, incised; d. 32, h. 16. G5-1342. XI-A, 6K. Baghdad.
41. Spindle whorl, terra cotta, incised; d. 36, h. 15. G5-1316. XI, 6K. Baghdad.
42. Spindle whorl, terra cotta; d. 35, h. 23. G4-716. XI, 6M. 35-10-73.
43. Spindle whorl, terra cotta, incised; d. 36. G3-27. IX, 7-O. Baghdad.
44. Spindle whorl, terra cotta, appliqué; d. 32, h. 20. G3-304. IX, 10-M. 33-3-144.
45. Spindle whorl, terra cotta, incised; d. 34, h. 16. G5-1354. X-A, 6G. 36-6-33.
46. Spindle whorl, terra cotta, incised and punctured; d. 34, h. 21. G5-1332. X-A, 7K. 36-6-31.

PLATE CLVI

47. Nail-shaped muller, terra cotta; l. 80, d. 50. G6-436. Below XIII, 5-O. Baghdad.
48. Cone, terra cotta; h. 131, d. 56. G5-1645. XI-A, 8M. 36-6-148.
49. Nail-shaped muller, terra cotta; l. 91, d. 59. G6-223. XIII, 5Q. 37-16-319.
50. Cone, terra cotta, brown paint; l. 105, head d. 30. G6-209. Area A. Baghdad.
51. Gaming piece, terra cotta; h. 30, d. 21. G6-450. XIII, 5Q. Baghdad.

52. Gaming piece, terra cotta; h. 35, d. 18. G7-24. XVI, 3J. 38-13-313. (=Plate LXXXIV.b, No. 1.)
53. Gaming piece, terra cotta; h. 50, d. 22. G7-151. XVI, 4M. Baghdad. (=Plate LXXXIV.b, No. 6.)
54. Nail-shaped muller, terra cotta, black paint; l. 90, d. 37. G6-395. XIII, 4-O. 37-16-318.
55. Gaming piece, terra cotta; ex. h. 34, w. 27. G7-136. XVI, 3K. Baghdad. (=Plate LXXXIV.b, No. 3.)
56. Gaming piece, terra cotta; ex. h. 40, w. 20. G7-169. XVI, 5S. 38-13-315.
57. Gaming piece, terra cotta; ex. h. 44, w. 27. G7-170. XVI, 5Q. 38-13-314.
58. Gaming piece, terra cotta; h. 51, ex. w. 20. G7-142. XVI, 4M. Baghdad. (=Plate LXXXIV.b, No. 2.)
59. "Hut symbol," terra cotta, incised; h. 196, d. 164. G3-97. IX, 9M. Baghdad.
60. "Hut symbol," terra cotta; h. 78, d. 65. G6-166. X-A, 8Q. Baghdad.
61. "Hut symbol," terra cotta; h. 160, d. 120. G6-67B. X-A, 7K. 37-16-23.

PLATE CLVII

62. "Hut symbol," terra cotta; h. 110, w. 60. G4-629. XI, 6-O. Baghdad.
63. "Hut symbol," terra cotta; h. 160, w. 146. G5-1374. XI, 6J. Baghdad. (=Plate LXXXVI.a, No. 2.)
64. "Hut symbol," terra cotta; ex. h. 110, ex. w. 120. G3-77. IX, 9-O. Baghdad.
65. "Hut symbol," terra cotta; h. 135, w. 127. G5-1288. XI, 6J. 36-6-65. (=Plate LXXXVI.a, No. 8.)
66. "Hut symbol," terra cotta or stone; h. 115, w. 100. G4-601. 4K, edge of tepe. Baghdad.
67. "Hut symbol" (?), sun-baked clay; h. 142, w. 112. G7-9. XVI, 4J. 38-13-309.
68. Cult object (?), sun-baked clay; h. 200, base d. 300, knob d. 135. G6-105. XI, 7Q. Baghdad.
69. Cult object (?), sun-baked clay; h. 173, d. 245. G6-59. XI, 7Q. Baghdad.
70. Stamp, terra cotta; h. 40, w. 40. G3-74. Dump. Baghdad.
71. Object, terra cotta, incised; l. 51, d. 25. G6-378. XIII, 3-O. Baghdad.
72. Jar stopper, sun-baked clay; h. 68, d. 113. No field number. XIII, 4J. No disposition.

PLATE CLVIII

1. Seal, button shape; black steatite. D. 20, ex. h. 4. G7-465. XIX, 5J. Baghdad.
2. Seal, button shape; serpentine. D. 20, ex. h. 11. G6-430. XIII, 3-O. Baghdad.

3. Seal, button shape; light brown marble. D. 16, w. 11, h. 8. G7-176. XV, 5-O. Baghdad.
4. Seal, gable shape; agate. H. 10, l. 13, w. 9. G7-183. Dump. 38-13-1086.
5. Seal, pyramidal shape; gray limestone. H. 14, l. 12, w. 10. G6-123. XIII, 5K. 37-16-355.
6. Seal, stalk shape; gray limestone. H. 22, d. 17. G4-945. XI, 5Q. 35-10-102.
7. Seal, hemispheroidal shape; black steatite. H. 6, d. 15. G5-1451. X-A, 6M. 36-6-38.
8. Seal, gable shape; bone. L. 22, w. 18, h. 10. G4-1171. XII, 5-O. 35-10-250.
9. Seal, gable shape; translucent serpentine. L. 15, w. 15, h. 4. G6-417. XIII, 5Q. 37-16-353.
10. Seal, lentoid shape; stone. D. 20, h. 8. G5-1471. XI-A, 5K. Baghdad.
11. Impression, rope marks. W. 15. G6-544. Area A, Level D. 37-16-592.
12. Seal, hemispheroidal shape; gray limestone. D. 16, h. 8. G3-179. IX, 8M. 33-3-84.
13. Seal, hemispheroidal shape; black steatite. D. 13, h. 6. G5-1344. X-A, 4K. 36-6-39.
14. Seal, hemispheroidal shape; soft white limestone. D. 21, h. 9. G6-366. XII, 6G. Baghdad.
15. Seal, conoidal shape; terra cotta. D. 19, h. 17. G7-185. XVI?, 6S. Baghdad.

PLATE CLIX

16. Impression. D. 17. G4-1225. XII, 4M. 35-10-281.
17. Multiple impression. D. 13. G4-1208. XII, 4-O (White Room). 35-10-277.
18. Impression. L. 15, w. 14. G4-1206. XI-A, 6-O. 35-10-186.
19. Seal, gable shape; gray steatite. L. 21, w. 19, h. 11. G6-249. Below XII, 5M. 37-16-210.
20. Seal, hemispheroidal shape; steatite. D. 16, h. 4. G4-1088. XI, 4M. 35-10-115.
21. Impression. D. 21. G7-57. XI, 9M. Baghdad.
22. Seal, hemispheroidal shape; black steatite. D. 15, h. 6. G5-1345. X-A?, 6G. Baghdad.
23. Seal, hemispheroidal shape; black steatite. D. 17, h. 7. G7-153. XI, 9M. 38-13-11.
24. Seal, hemispheroidal shape; steatite. D. 15, h. 5. G4-1176. XII, 5-O. 35-10-253.
25. Seal, pyramidal shape; dark gray serpentine. L. 19, w. 15, h. 11. G5-1641. XII, 6-O. 36-6-298.
26. Seal, hemispheroidal shape; black steatite. D. 16, h. 7. G7-360. Below XII, 10-M. 38-13-49.
27. Seal, hemispheroidal shape; white paste. D. 22, h. 10. G7-251. XII, 6M. 38-13-43.
28. Seal, hemispheroidal shape; black steatite. D.

18, h. 7. G5-1328. XI, 3M. 36-6-112.
(=Plate LXXXVIII.a, No. 1.)

29. Multiple impression, reed marks. D. 18. G7-80. XIII Well. 38-13-84.

30. Seal, hemispheroidal shape; black steatite. D. 16, h. 8. G4-1055. XI-A, 6-O. Baghdad.

PLATE CLX

31. Seal, lentoid shape; pink marble. D. 35, h. 13. G6-92. XI-A, 5M. 37-16-74.
32. Seal, hemispheroidal shape; white paste. D. 25, h. 7. G6-73. XI-A, 5J. Baghdad.
33. Seal, hemispheroidal shape; soft limestone. D. 18, h. 7. G5-1385. XI-A, 4J. Baghdad.
34. Impression. L. 19, w. 12. G7-81. XVI, 3M. Baghdad.
35. Seal, hemispheroidal shape; dark brown steatite. D. 17, h. 8. G5-1588. XII, 6Q. 36-6-296.
36. Seal, gable shape; haematite. L. 17, w. 14, h. 8. G6-135. XI-A, 5G. Baghdad.
37. Seal, conoidal shape; terra cotta. D. 25, h. 19. G6-451. XIII, 4-O. 37-16-351. (=Plate LXXXVIII.a, No. 12.)
38. Impression. L. 29, w. 20. G7-125. XIII Well. Baghdad.
39. Impression. W. 18. G7-124. XIII Well. Baghdad.
40. Seal, lentoid shape; black steatite. D. 23, h. 5. G4-1181. XII, 5-O. Baghdad.
41. Seal, hemispheroidal shape; white paste. D. 12, h. 6. G4-779. X, 5J. 35-10-17.
42. Seal, spool shape; green serpentine. D. 23, h. 16. G4-808. XI, 6-O. 35-10-105.
43. Multiple impression. W. 20. G7-99. XIII Well. Baghdad and Philadelphia (38-13-83).
44. Seal, lentoid shape; white paste. D. 13, h. 4. G3-315. IX, 7Q. 33-3-152.
45. Seal, hemispheroidal shape; white paste. D. 11, h. 9. G6-84. XI-A, 4J. 37-16-86.

PLATE CLXI

46. Seal, lentoid shape; green serpentine. L. 13, w. 11, h. 4. G6-364. XII, 4G. 37-16-204.
47. Seal, hemispheroidal shape; steatite (?). D. 17, h. 8. G3-332. X, 11K. 33-3-158. (=Plate LXXXVIII.a, No. 2.)
48. Impression. L. 30, w. 23. G7-122. XIII Well. 38-13-80.
49. Seal, lentoid shape; black steatite. L. 23, d. 19, h. 12. G7-339. XIII, 6-O. Baghdad.
50. Seal, hemispheroidal shape; black steatite. D. 15, h. 5. G7-232. XII, 8M. 38-13-48.
51. Impression. D. 17. G7-273. XVII, 4G. 38-13-513.

52. Seal, detail of shape not given; paste. L. 19, w. 16. G5-1656. XIII, 5-O. Baghdad.
53. Impression. D. 23. G5-1378. XI-A, 3K. Baghdad.
54. Multiple impression. L. 20, w. 17. G3-413. X, 6Q. Baghdad.
55. Multiple impression. L. 30, w. 25. G4-642. XI, 6Q. Baghdad.
56. Seal, hemispheroidal shape; stone. D. 18, h. 5. G3-486. XI, 5Q. Baghdad.
57. Seal, lentoid shape; white paste. D. 25, h. 7. G7-274. XII, 7M. 38-13-42.
58. Impression. L. 29, w. 20. G7-173. Dump (XII?). Baghdad.
59. Impression. D. 13. G7-84. XI, 10-M. 38-13-21.
60. Seal, hemispheroidal shape; white paste. D. 18, h. 4. G6-90. XI-A, 5K. 37-16-83. (=Plate LXXXVIII.a, No. 3.)
61. Impression. D. 16. G5-1370. XI, 6K. 36-6-130.
62. Impression. D. 20. G7-120. XIII Well. Baghdad.
63. Impression. D. 22. G5-1648. XII, 6-O. Baghdad.
64. Impression. D. 26. G7-172. XIII Well. 38-13-86.
65. Impression. D. 33. G4-1092. XII, 5-O (White Room). 35-10-120.

PLATE CLXII

66. Seal, hemispheroidal shape; black steatite. D. 31, h. 12. G6-86. XI-A, 5K. 37-16-75.
67. Impression, rope marks. L. 20, w. 17. G5-1514. XII, 4M. 36-6-307.
68. Seal, hemispheroidal shape; white paste. D. 24, h. 7. G7-209. XII, 7M. Baghdad.
69. Multiple impression. L. 22, w. 16. G6-387. XIII, 4Q. Baghdad.
70. Multiple impression. D. 23. G7-123. XIII Well. Baghdad and Philadelphia (38-13-81 a-c).
71. Multiple impression, cloth marks. D. 13. G7-212. XII, 7M. Baghdad and Philadelphia (38-13-51).
72. Seal, hemispheroidal shape; terra cotta. D. 15, h. 7. G5-1349. XI, 5J. 36-6-114.
73. Seal, conoidal shape; white paste. D. 15, h. 8. G4-1052. XI-A, 6M. Baghdad.
74. Seal, hemispheroidal shape; steatite. D. 11, h. 7. G3-220. IX, 9-O. 33-3-108.
75. Seal, gable shape; reddish-brown stone. D. 21, h. 8. G5-1630. XII, 6K. Baghdad.
76. Seal, hemispheroidal shape; black steatite. D. 21, h. 8. G5-1640. XII, 6-O. 36-6-297. (=Plate LXXXVIII.a, No. 7.)

77. Seal, hemispheroidal shape; black steatite. D. 28, h. 10. G7-114. XI-A, 10-M. 38-13-10. (=Plate LXXXVIII.a, No. 10.)
78. Impression. D. 28. G5-1595. XII, 5Q. 36-6-309.
79. Multiple impression, reed marks. D. 19. G7-134. XI-A, 9M. Baghdad and Philadelphia (38-13-31).
80. Seal, rectangular plaque; black steatite. L. 18, w. 14, h. 6. G4-693. XI-A, 4Q. 35-10-171.

PLATE CLXIII

81. Impression, reed and rope marks. Ex. w. 36. G7-93. XI, 10-M. 38-13-18.
82. Impression. D. ca. 33. G6-101. XI-A, 5-O. Baghdad. (=Plate LXXXIX.d.)
83. Impression. Ex. l. 44. G4-998. XII, 5Q. 35-10-267.
84. Seal, gable shape; diorite. L. 26, w. 22, h. 12. G6-133. XI-A, 6J. 37-16-76.
85. Impression. Ex. w. 40. G5-1399. XI-A, 4J. 36-6-213.
86. Impression, on a clay ball. D. 30. G7-58. XI-A, 9M. Baghdad. (=Plate LXXXIX.c.)
87. Impression. D. 32. G5-1425. XI-A, 4J. Baghdad.
88. Multiple impression. D. 19. G7-82. XI, 10-M. Baghdad.
89. Impression. W. 24. G5-1557. XI-A, 6K. Baghdad.
90. Impression. D. 20. G4-1191. XII, 4M. Baghdad.
91. Impression. L. 29, w. 28. G4-956. XII, 3M. Baghdad.
92. Impression. L. 24, w. 22. G7-100. XIII Well. Baghdad.

PLATE CLXIV

93. Impression. Ex. w. 38. G5-1243. XI-A, 6-O. Baghdad.
94. Multiple impression. Ex. d. 28. G7-146. XIII Well. Baghdad and Philadelphia (38-13-74).
95. Seal, gable shape; serpentine. L. 18, w. 17, h. 6. G6-323. XIII, 3K. 37-16-357. (=Plate LXXXVIII.a, No. 5.)
96. Seal, lentoid shape; white marble. D. 32, h. 14. G4-605. X, 6-O. Baghdad.
97. Impression, rope marks. L. 30, w. 26. G5-1625. XI-A, 6-O. 36-6-206.
98. Impression. D. 29. G6-607. Below XV, 3M. 37-16-393.
99. Impression, rope marks. Ex. l. 25, w. 23. G4-1193. XII, 4M. 35-10-270.
100. Multiple impression. D. 33. G7-126. XIII Well. Baghdad and Philadelphia (38-13-73 a-f).

101. Impression, rope marks. Ex. l. 29. G6-240. XIII, 5M. 37-16-358.
102. Multiple impression. Ex. d. 30. G7-98. XIII Well. Baghdad.
103. Seal, lentoid shape, stone. L. 21, w. 18, h. 5. G7-312. XVIII, 4K. Baghdad.

PLATE CLXV

104. Seal, lentoid shape, marble. D. 18, h. 7. G7-184. XV, 5S. 38-13-123.
105. Multiple impression, rope marks. D. 21. G5-1720. XIII, 4M. Baghdad and Philadelphia (36-6-348).
106. Seal, hemispheroidal shape, bone. D. 21, h. 7. G5-1367. XI, 4K. Baghdad.
107. Multiple impression. D. 23. G6-96. XII, 4J. 37-16-213.
108. Seal, hemispheroidal shape, black steatite. D. 20, h. 10. G4-721. X, 5J. Baghdad.
109. Seal, shape not described, black steatite. Four inlay holes. D. 24, h. 10. G4-1089. XII, 6-O. Baghdad.
110. Seal, hemispheroidal shape, black steatite. D. 22, h. 8. G7-253. XII, 7-M. 38-13-44.
111. Seal, hemispheroidal shape, mottled black and green serpentine. Four inlay grooves. D. 22, h. 9. G6-151. XII, 5J. 37-16-208.
112. Seal, gable shape, black steatite. Two inlay holes. D. 21, h. 8. G4-896. XI, 3M. 35-10-106.
113. Seal, hemispheroidal shape, serpentine (?). D. 26, h. 10. G6-134. XI-A, 6K. Baghdad.
114. Multiple impression, rope marks. D. 10. G5-1376. XI-A, 4K. 36-6-216.
115. Seal, hemispheroidal shape, black steatite. D. 25, h. 9. G6-214. XI-A, 6-O. 37-16-77.

PLATE CLXVI

116. Impression, rope marks. L. 17, w. 16. G5-1259. X, 6J. 36-6-19.
117. Seal, hemispheroidal shape, black steatite. D. 22, h. 9. G3-207. IX, 9Q. Baghdad.
118. Impression, rope marks. D. 22. G3-200. IX, 8M. 33-3-95.
119. Seal, gable shape, black steatite (?). L. 19, w. 17, h. 9. G4-785. Dump. Baghdad.
120. Impression, rope marks. L. 20, w. 17. G7-64. XI, 10-M. 38-13-15.
121. Impression, rope marks. D. 25. G6-580. Dump (XIII?). 37-16-359.
122. Impression, rope marks. D. 20. G4-1209. XII, 5-O. 35-10-278.
123. Impression on a clay ball. L. 10, w. 7. G6-234. Area A. Baghdad. (=Plate LXXXIX.b.)

124. Seal, hemispheroidal shape, black steatite (?). D. 24. G7-275. XII, 9M. Baghdad.
125. Seal, hemispheroidal shape, black steatite. D. 20, h. 7. G3-408. X, 4-O. Baghdad.
126. Impression. Ex. w. 33. G5-1237. XII, 4M. 36-6-306.
127. Seal, hemispheroidal shape, dark brown marble (?). D. 23, h. 7. G5-1638. XI-A, 7M. 36-6-204.
128. Impression, rope marks. Ex. l. 27, ex. w. 23. G5-1406. XII, 5Q. 36-6-311.
129. Impression. D. 18. G7-144. XI-A, 10-M. Baghdad.
130. Impression, reed and rope marks. Ex. l. 17, ex. w. 15. No field number. XII or XII-A. No disposition.

PLATE CLXVII

131. Multiple impression. L. 20, w. 17. G7-83. XI, 10-M. Baghdad.
132. Seal, hemispheroidal shape, serpentine. D. 19, h. 11. G7-257. XII, 11M. 38-13-45.
133. Impression, reed marks. Ex. d. 23. G7-128. XIII Well. 38-13-79.
134. Seal, hemispheroidal shape, red and white marble. D. 18, h. 5. G6-410. XIII, 4-O. 37-16-356.
135. Seal, gable shape, translucent obsidian. L. 22, w. 20, h. 10. G6-596. XI, 6K. Baghdad.
136. Seal, gable shape, red and black marble. L. 21, w. 18, h. 9. G3-438. X, 9M. 35-10-16.
137. Impression. Ex. l. 28, ex. w. 13. G3-434. X, 8-O. Baghdad.
138. Impression. D. 18. G5-1240. XII, 4M. 36-6-313.
139. Seal, hemispheroidal shape, obsidian. D. 18, h. 13. G7-228. XII. 38-13-46.
140. Seal, hemispheroidal shape, brown carnelian. D. 13, h. 6. G7-389. XVIII, 3J, Locus 7-66, grave. 38-13-766.
141. Multiple impression, rope marks. D. 33. G6-608. Northeast Base. Baghdad.
142. Impression. Ex. l. 23, ex. w. 23. G5-1650. XI-A, loose earth. Baghdad.
143. Impression. D. 34. G5-1428. XI-A, 4M. Baghdad.
144. Impression, on a long pointed piece of clay. L. 31, w. 24. G7-132. XI, 10-M. 38-13-12.

PLATE CLXVIII

145. Seal, hemispheroidal shape, black steatite. D. 24, H. 10. G6-273. X-A, 6G. 37-16-29.
146. Impression, rope marks. D. 29. G5-1426. XI, 5K. Baghdad.
147. Multiple impression. D. 27. G5-1289. XI, 6J. Baghdad and Philadelphia (36-6-126).

148. Seal, rectangular plaque, serpentine. L. 19, w. 16, h. 8. G4-609. X, 4-O. 35-10-15.
149. Multiple impression, rope marks. L. 25, w. 20. G3-495. X, 8J. Baghdad and Philadelphia (35-10-18).
150. Multiple impression. L. 22, w. 19. G6-210. X, 8J. 37-16-15.
151. Multiple impression, rope marks. L. 15, w. 12. G6-609. Dump. Baghdad.
152. Multiple impression. D. 30. G6-103. XI, 5J. Baghdad.
153. Multiple impression. D. 17. G5-1301. XI, 6J. Baghdad and Philadelphia (36-6-127).
154. Impression, rope marks. L. 20, ex. w. 14. G5-1651. XI-A, 7M (Round House, Room M). 36-6-210.
155. Multiple impression. L. 53, w. 29. G5-1574. XI-A, 4M. Baghdad.
156. Impression, on a clay ball, rope marks through center. D. 35. G5-1573. XI-A, 5J. 36-6-208.
157. Impression, on a clay ball. L. 34, w. 30. G6-444. Surface. Baghdad.

PLATE CLXIX

158. Impression. L. 25, w. 22. G7-60. XI, 10-M. Baghdad.
159. Impression, rope marks. D. 29. G7-96. XI, 10-M. 38-13-13.
160. Seal, gable shape, bone. L. 38, w. 32, h. 11. G6-42. X-A, 8-O. Baghdad.
161. Impression. D. 29. G5-1594. XI-A, 7K (Round House). 36-6-121.
162. Impression. Ex. d. 32. G5-1657. XIII, 4-O. Baghdad.
163. Multiple impression. D. 38. G5-1619. XI, 7M. Baghdad.
164. Multiple impression. D. 30. G5-1310. X-A, 6K. Baghdad and Philadelphia (36-6-41 and 36-6-43).
165. Multiple impression. D. 35. G3-189. IX, 8M, (Temple, Room 902). 33-3-89.
166. Multiple impression. D. 33. G5-1624. XI-A, 6M (Round House, Room C). Baghdad.
167. Seal, shape not described, lapis lazuli. D. 33, h. 16. G7-205. Dump. Baghdad. (=Plate LXXXVIII.c.)
168. Impression. D. 21. G4-870. XI, 4M. 35-10-125.
169. Impression, on a clay ball. D. 29. G5-1668. XI-A, 7K. 36-6-207.

PLATE CLXX

170. Impression. D. 18. C4-840. XI, 5J. Baghdad.
171. Multiple impression. L. 37, w. 26. G7-65. XI, 10-M. Baghdad and Philadelphia (38-13-16).

172. Impression. Ex. l. 25, w. 20. G7-88. XI, 10-M. 38-13-77.
173. Multiple impression, reed marks. D. 31. G7-147. XIII Well. Baghdad and Philadelphia (38-13-75, a and b).
174. Impression, rope marks. L. 23, w. 22. G6-266. XI-A, dump. 37-16-88.
175. Multiple impression, on a shaped piece of clay probably a jar stopper. D. 29. G4-797. XI, 4K. 35-10-118.
176. Seal, hemispheroidal shape, black steatite. D. 22, h. 10. G6-257. XII, 5J. 37-16-209. (=Plate LXXXVIII.a, No. 11.)
177. Impression. D. 13. G4-889. XI, 5M. 35-10-126.
178. Impression, cloth marks. D. 19. G3-481. X, 6K. 35-10-20.
179. Impression. Ex. d. 47. G5-1239. XII, 4M. 36-6-305. (=Plate LXXXVIII.b.)
180. Impression. Ex. d. 35. G5-1248. XI, 6K. Baghdad.
181. Seal, hemispheroidal shape, obsidian. D. 15, h. 10. G4-1025. XI, 4-O. Baghdad.
182. Multiple seal impression, rope marks. Ex. d. 25. G4-1203. XII, 4-O. 35-10-275.
183. Seal, gable shape, stone. D. 20, h. 10. G5-1392. XI-A, 4J. Baghdad.
184. Impression, rope marks. Ex. l. 24. G3-376A. X, 8-O. 33-3-186.

PLATE CLXXI

1. Bead, carnelian; l. 25, w. 20. G7-18. XI, 10-M. 38-13-331.
2. Bead, translucent white quartz; l. 44, w. 30. G5-1336. XI, 4K. Baghdad.
3. Bead spreader, lapis lazuli; l. 18, w. 11. G3-300. Dump. 33-3-143.
4. Bead, yellow sandstone; l. 24, w. 12. G6-174. Dump. Baghdad.
5. Bead, white paste; w. 12. G7-229. XVII, 5G. Baghdad.
6. Button, white marble; d. 10, h. 6. G6-498. XV, 4M. 37-16-392.
7. Engraved bead, carnelian; l. 21, w. 15. G6-1. Surface. 37-16-598.
8. Engraved bead, carnelian; l. 24, w. 17. G6-482. XV, 6G. Baghdad.
9. Engraved bead, black steatite; l. 25, w. 20. G6-340. XI-A, 7S. 37-16-82. (=Plate XCII.a, No. 4.)
10. Engraved bead, black steatite; l. 21, w. 15. G6-587. XII, 11M. Baghdad.
11. Engraved bead, marble; l. 22, w. 15. G4-883. XI, 4-O. Baghdad.

12. Engraved bead, black steatite; l. 28, w. 13. G3-397. X, 4-O. Baghdad.
13. Engraved bead, gray-green serpentine; l. 23, w. 14. G6-389. XIII, 5-O. 37-16-354. (=Plate XCII.a, No. 5.)
14. Engraved bead, red and white stone; l. 17, w. 13. G6-435. XIII, 4Q. Baghdad.
15. Engraved bead, serpentine (?); l. 25, d. 9. G6-391. XIII, 5-O. Baghdad.
16. Engraved bead, black steatite; l. 25, d. 10. G6-285. Below XII, 5M, Locus G36-106, grave. 37-16-196. (=Plate XCII.a, No. 3.)

PLATE CLXXII

17. Tanged pendant, serpentine; h. 16, w. 11. G6-458. Area A, Level D. Baghdad.
18. Tanged pendant, serpentine; h. 20, w. 12. G6-459. Area A, Level D. 37-16-587.
19. Tanged pendant, serpentine; h. 24, w. 18. G6-457. Area A, Level D. Baghdad.
20. Tanged pendant, white marble; h. 18, w. 12. G7-321. Below XVII, 4G, Locus 7-47. grave. 38-13-520.
21. Tanged pendant, black stone; h. 17, w. 10. G5-1614. XI, 7-O. Baghdad.
22. Tanged pendant, obsidian; h. 23, w. 16. G7-63. XVI, 4M. 38-13-334.
23. Tanged pendant, dark-gray steatite; h. 21, w. 12. G6-298. XII. Baghdad.
24. Tanged pendant, gray marble with buff veins; h. 20, w. 14. G6-296A. XII, 4M. 37-16-198.
25. Tanged pendant, white marble; h. 19, w. 14. G7-23. XVI, 5J. Baghdad.
26. Tanged pendant, dark gray marble; h. 24, w. 21. G7-203. XVI, 5E. 38-13-335.
27. Tanged pendant, steatite (?); h. 28, w. 20. G6-99. XII. Baghdad.
28. Tanged pendant, green serpentine; h. 16, w. 9. G6-575. XV, 4-O. 37-16-390.
29. Tanged pendant, obsidian; h. 25, w. 18. G6-464. XV, 4J. Baghdad.
30. Tanged pendant, greenish-black serpentine; h. 29, w. 22. G6-494. Area A Well, 37-16-591.
31. Tanged pendant, brown marble; h. 39, w. 30. G6-198. Area A. 37-16-590.

PLATE CLXXIII

32. Tanged pendant, gray marble; h. 15, w. 9. G6-495. Area A Well. Baghdad.
33. Tanged pendant, marble (?); h. 27, w. 21. G7-177. XVI, 5Q. Baghdad.
34. Tanged pendant, black limestone; h. 22, w. 13. G5-1363. Dump. 36-6-392.
35. Tanged pendant, pink marble; ex. h. 23, w. 21. G6-449. XIII, 4-O. Baghdad.

36. Tanged pendant, marble (?); ex. h. 14, w. 13. G3-270. Dump. Baghdad.
37. Tanged pendant, gray marble (?); h. 15, w. 8. G4-875. X, 10-O. Baghdad.
38. Tanged pendant, gray marble (?); h. 35, w. 30. G7-454. XIX, 4J. Baghdad.
39. Tanged pendant, black marble; h. 21, w. 17. G6-452. XIII, 6Q. Baghdad.
40. Tanged pendant, serpentine (?); h. 31, w. 33. G5-1711. XII, 5-O. Baghdad.
41. Tanged pendant, white paste; h. 15, w. 10. G6-564. XII, 11M. 37-16-197.
42. Tanged pendant, mother-of-pearl; h. 13, w. 9. G5-1234. XI. 36-6-107.
43. Tanged pendant, black granite; h. 23, w. 8. G7-54. XI, 9M. 38-13-9.
44. Tanged pendant, black steatite; h. 15, w. 9. G6-163. XII, 6K. Baghdad.
45. Pendant, obsidian; h. 28, w. 17. G7-29. XVI, 5J. Baghdad.
46. Pendant, white limestone; h. 27, w. 20. G6-371. XIII, 4Q. Baghdad.
47. Pendant, serpentine; h. 10, w. 19. G7-258. XII, 11M. 38-13-40.

PLATE CLXXIV

48. Pendant, black steatite; h. 15, w. 13. G6-296B. XII, 4M. Baghdad.
49. Pendant, black limestone; h. 30, w. 14. G6-188. Area A. 37-16-586.
50. Pendant, obsidian; h. 43, w. 33. G6-453. XV (?), 4-O. 37-16-363.
51. Pendant, obsidian; h. 32, w. 24. G6-443. XIII, 4J, Eastern Shrine. Baghdad.
52. Pendant, obsidian; h. 54, w. 17. G6-405. Area A, Level D. Baghdad.
53. Pendant, obsidian; h. 25, w. 12. G6-164. Dump. 37-16-600.
54. Pendant, obsidian; h. 38, w. 16. G7-167. XVI, 5S. Baghdad.
55. Pendant, obsidian; d. 20, t. 5. G6-247. Northeast Base. Baghdad.
56. Pendant, brownish-black stone; h. 24, w. 18. G7-490. Below XIX, 5K. Baghdad.
57. Pendant, black steatite; ex. h. 30, w. 8. G3-312. IX, 11Q. Baghdad.
58. Pendant, gray marble; h. 18, w. 15. G7-91. XI, 10-M. Baghdad.
59. Pendant or amulet, stone; ex. h. 30, d. 15. G4-1018. XI-A, 5Q. Baghdad.
60. Pendant or amulet, gray marble; h. 20, w. 15. G7-440. Below XVIII, 3K. 38-13-746.
61. Pendant or amulet, gray marble; h. 16, w. 12. G7-14. XVI, 4J. Baghdad.

62. Pendant or amulet, white marble; l. 26, h. 21, t. 5. G6-157. XI, 8-O. 37-16-38.
63. Pendant or amulet, gray marble; l. 17, h. 10, t. 4. G6-506. Area A. 37-16-589. (=Plate XCII.a, No. 7.)

PLATE CLXXV

64. Pendant or amulet, marble; w. 21, h. 16, t. 3. G5-1359. XI, 6G. 36-6-108.
65. Pendant or amulet, lapis lazuli; l. 17, h. 7. G3-54. IX, 6M. Baghdad.
66. Pendant or amulet, gold and lapis lazuli; l. 22, h. 5. G5-1456. X, 7K. Baghdad.
67. Ornament, black steatite; l. 24, w. 17. G7-4. Dump. 38-13-1088.
68. Ornament, dark green serpentine; l. 27, w. 13. G6-352. Below XII, 4G, Locus G36-141, grave. 37-16-200.
69. Ornament, obsidian; l. 26, w. 17. G6-206. Northeast Base. 37-16-423. (=Plate XCII.a, No. 9.)
70. Ornament, obsidian; l. 42, w. 20. G6-228. Northeast Base. Baghdad.
71. Ornament, obsidian; l. 60, w. 20. G7-6. XVI, 4J. 38-13-333.
72. Nail-shaped stud, gray marble (?); l. 27, d. 6. G7-38. XVI, 5J. Baghdad.
73. Nail-shaped stud, gray limestone; l. 23, d. 5. G6-461. XIII, 6Q. 37-16-349. (=Plate XCII.a, No. 11.)
74. Ornament, gold; d. 23. G5-1420. XI-A, 4K, Locus 181, grave. Baghdad.
75. Ornament, gold leaf over bitumen; l. 17, w. 10, t. 2. G6-181. X-A, 7G. Baghdad.
76. Rosette, gold, d. 48, t. 4. G5-1419. XI-A, 4K, Locus 181, grave. 36-6-354.

PLATE CLXXVI

1. Blade, obsidian; l. 93, w. 18, t. 3. G6-529. Area A Well. 37-16-583.
2. Blade, obsidian; l. 63, w. 11. G6-10. XII, 5Q. Baghdad.
3. Blade, obsidian; l. 30, w. 6. G6-204A. XII, 4J. Baghdad.
4. Borer, obsidian; l. 39, w. 8. G6-204B. XII, 4J. Baghdad.
5. Blade, obsidian; l. 47, w. 8. G6-204A. XII, 4J. Baghdad.
6. Borer, obsidian; l. 49, w. 7. G6-204B. XII, 4J. 37-16-182.
7. Scraper, obsidian; l. 47, w. 19. G6-149A. XI, 5J. Baghdad.
8. Blade, obsidian; l. 60, w. 8. G6-149B. XI, 5J. Baghdad.
9. Blade, obsidian; l. 71, w. 20. G6-149C. XI, 5J. Baghdad.

10. Blade, obsidian; l. 125, w. 22. G6-304. XII, 6J. 37-16-181.
11. Blade, obsidian; l. 113, w. 15. G6-130. XI-A, 4J. Baghdad.
12. Blade, obsidian; l. 131, w. 19. G6-91. XI-A, 4J. 37-16-71.
13. Blade, obsidian; l. 136, w. 27. G6-69. X-A, 6K. Baghdad.
14. Blade, flint; l. 105, w. 16. G3-246. IX, 9-O. Baghdad.
15. Blade, flint, encased in bitumen; l. 62, ex. h. 25, t. 15. G6-603. XII, 11M. Baghdad.
16. Blade, flint, set in bitumen; l. 85, w. 33. G5-1448. XI-A, 5J. No disposition.
17. Razor (?), mother-of-pearl; l. 68, w. 17, t. 4. G6-143. XII, 8Q. Baghdad.
18. Razor blade handle, gray limestone; l. 127, w. 30, t. 12. G6-97. XI-A, 5J. Baghdad.

PLATE CLXXVII

19. Celt, greenstone; l. 34, w. 34, t. 10. G7-166. XVI, 5S. Baghdad.
20. Celt, granite; l. 31, w. 25, t. 8. G7-34. XVI, 5J. Baghdad.
21. Celt, gray marble; l. 41, w. 26, t. 10. G6-437. XIII, 5-O. 37-16-335.
22. Celt, greenstone; l. 32, w. 27, t. 12. G6-386. XIII, 3-O. 37-16-336.
23. Celt, greenstone; l. 53, w. 40, t. 20. No field number. XIII. No disposition.
24. Celt, basalt; l. 34, w. 34, t. 13. G6-13. XII, 5Q. Baghdad.
25. Celt, granite; l. 35, w. 45, t. 13. No field number. XIII. No disposition.
26. Celt, granite; l. 71, w. 39, t. 14. No field number. XIII. No disposition.
27. Celt, greenstone; l. 36, w. 21, t. 10. No field number. XIII. No disposition.
28. Celt, greenstone; l. 40, w. 23, t. 11. G6-184. X, 7J. 37-16-12.
29. Mace-head, black marble; l. 77, w. 60, h. 45. G6-556. XVI, 4-O. 37-16-401.
30. Mace-head, white and brown marble; h. 37, d. 55. G6-239. XII, 4J. Baghdad.
31. Mace-head, light brown marble; d. 60, h. 31. G6-272. XII, 5J. Baghdad.
32. Mace-head, red and white marble; d. 49, h. 43. G5-1311. X, 6G. Baghdad.
33. Mace-head, marble; h. 48, d. 60. G3-479. XII, 4Q. No disposition.
34. Mace-head, white marble; h. 35, d. 50. G6-265. XII, 5K. Baghdad.
35. Mace-head, black limestone; h. 53, d. 51. G3-330. IX, 10-K. Baghdad.

36. Mace-head, greenstone; h. 29, d. 34. G6-429. XIII, 5M. 37-16-334.
 37. Mace-head (?), basalt; h. 83, d. 38. G6-400. XIII, 5Q. 37-16-333.

PLATE CLXXVIII

38. Hammer, greenish granite; l. 152, w. 101, t. 56. G6-489. XV, 4M. Baghdad.
 39. Hammer, basalt; l. 93, w. 59, t. 35. G6-488. XV, 4M. Baghdad.
 40. Hammer, basalt; l. 120, w. 90, t. 40. G4-602. X, 6Q. 35-10-10.
 41. Hammer, basalt; l. 95, w. 58, t. 33. G3-272. IX, 7M. Baghdad.
 42. Hammer, greenish granite; l. 115, w. 80, t. 54. G6-171. Below XII, 4K. 37-16-178.
 43. Hammer, greenish granite (?); l. 88, w. 60, t. 25. XI, 6-O. 35-10-94.
 44. Pestle, basalt; h. 92, d. 55. No field number. XIII. No disposition.
 45. Pestle, granite; h. 278, d. 85. G6-329. XII, 5J. Baghdad.
 46. Grinder, basalt; h. 52, d. 52. No field number. XIII. No disposition.
 47. Grinder, basalt; h. 71, d. 45. G6-315. XI-A, 6J. Baghdad.

PLATE CLXXIX

48. Spindle whorl, stone; d. 28, h. 13. G4-963. XII, 5Q. Baghdad.
 49. Spindle whorl, steatite; l. 30, w. 20, h. 12. G4-836. XI, 6-O. Baghdad.
 50. Spindle whorl, black steatite; d. 21, h. 13. G4-720. Dump. 35-10-338.
 51. Gaming piece, white marble; l. 16, w. 10, t. 7. G6-467. XV, 4J. Baghdad.
 52. Gaming piece, black steatite; d. 25, t. 5. G6-274. XI, 7J. Baghdad.
 53. Gaming piece, alabaster; h. 30, d. 26. G5-1412A. XI-A, 4K, Locus 181, grave. 36-6-351. (=Plate XCVIa, No. 11.)
 54. Weight, black marble; l. 41, h. 26, t. 17. G6-503. XV, 5-O. Baghdad.
 55. Whetstone, gray stone; l. 192, w. 117, t. 27. G6-187. Northeast Base. 37-16-411.
 56. Whetstone, gray sandstone; l. 120, w. 100, t. 26. G6-302. XII, 5M. Baghdad.
 57. Mortar, pink marble; h. 60, d. 94. G6-144. XII, 5M. Baghdad.
 58. Mortar, basalt; h. 185, d. 264. G3-420. X, 6Q. Baghdad.
 59. Mortar, basalt; h. 57, d. 135. G3-87. IX, 8K. 33-3-42.
 60. Palette, white marble; l. 85, w. 52, h. 8. G6-224B. Northeast Base. 37-16-412.

61. Palette, yellow limestone; l. 87, w. 59, h. 15. G6-224A. Northeast Base. Baghdad.
 62. Palette, diorite; l. 118, w. 90, t. 10. G4-607. XIII, 5-O. Baghdad.

PLATE CLXXX

63. Ointment vase, black steatite; h. 49, w. 20. G4-606. XIII, 5-O. Baghdad.
 64. Ointment vase, black steatite; h. 28, d. 22. G5-1235. XII, 4M. 36-6-259.
 65. Ointment vase, black steatite; h. 56, w. 16. G6-66. Below XI-A, 4K. 37-16-66.
 66. Ointment vase, steatite; h. 40, d. 22. G5-1457. XI-A, 6K. Baghdad.
 67. Miniature bowl, black steatite; h. 11, d. 20. G6-154. XII, 4K. 37-16-171.
 68. Miniature pot, serpentine; h. 29, d. 34. G6-150. XII, 4K. Baghdad.
 69. Miniature bowl, black steatite; h. 17, d. 41. G6-227. Northeast Base. 37-16-415.
 70. Miniature jar, alabaster; h. 20, d. 22. G4-685. XII, 4Q. 35-10-232.
 71. Bowl, gray marble; h. 21, d. 90. G6-225. Northeast Base. 37-16-413.
 72. Bowl, gray and white marble; h. 20, d. 120. G6-226. Northeast Base. Baghdad.
 73. Bowl, red paint, brown marble; h. 35, d. 100. G6-331. Northeast Base. Baghdad.
 74. Bowl, red and white breccia; h. 47, d. 113. G6-294. Area A. 37-16-576.
 75. Bowl, gray and white marble; h. 65, d. 109. G7-458. XIX, 4G, Locus 7-80, grave. Baghdad.
 76. Bowl, gray and white marble; h. 45, gr. d. 95. G7-456. XIX, 4G, Locus 7-80, grave. Baghdad.
 77. Bowl, gray marble; h. 63, d. 113. G7-457. XIX, 4G, Locus 7-80, grave. 38-13-892.
 78. Bowl, red marble; h. 80, d. 189. G7-455. XIX, 4G, Locus 7-80, grave. 38-13-891.
 79. Bowl, gray and white marble; h. 35, d. 70. G7-385. XVIII, 3J, Locus 7-66, grave. Baghdad.
 80. Bowl, gray marble; h. 34, d. 92. G7-402. XVIII, 3J, Locus 7-66, grave. Baghdad.

PLATE CLXXXI

81. Bowl, dark gray marble; h. 38, d. 85. G7-401. Below XVIII, 4J, Locus 7-68, grave. 38-13-768.
 82. Jar, stone; ex. h. 44, d. 110. No field number. XII, 3-O. No disposition.
 83. Bowl, gray and white marble; h. 46, d. 111. G7-259. XVII, 4J. 38-13-506.
 84. Bowl, gray marble; h. 40, d. 82. G7-260. XVII, 4J. Baghdad.

85. Bowl, gray marble; h. 29, d. 96. G7-164. XV, 3J. 38-13-321.
86. Pot, granite; h. 81, d. 130. G6-426. XIII, 3M, under floor of Northern Temple. 37-16-329.
87. Bowl, gray breccia; h. 41, ex. d. 57. G7-293. XIII, 7-O. 38-13-55.
88. Jar, red marble; h. 61, d. 85. G6-463. Below XII, 6Q, Locus G36-156, grave. 37-16-170.
89. Bowl, marble; h. 51, d. 95. G5-1485. XI-A, 5M. 36-6-171.
90. Pot, marble; h. 48, d. 78. G5-1308. XI (?), 6G. Baghdad.
91. Bowl, greenish granite; h. 61, d. 155. G6-56. XI, 8S. 37-16-37.
92. Bowl, gray marble; h. 41, d. 99. G6-394. XI, 7K. Baghdad.
93. Ornament, white marble; l. 53, w. 24, t. 13. G7-42. XVI, 5K. Baghdad.
94. Tablet, diorite; l. 34, w. 28, t. 13. G6-374. XIII, 5J. 37-16-331.
95. Sling pellet; white marble; l. 58, w. 37, t. 29. G4-625. XI, 5-O. 35-10-88.
96. Moulding (?), gray limestone; ex. h. 46, ex. w. 45, t. 32. No field number. XIII. No disposition.
2. Mouthpiece (?), copper; h. 60, d. 26. G5-1353. Below XI, 4K. 36-6-192.
3. Adze, copper; l. 140, w. 40, t. 16. G4-819. XI, 6Q. Baghdad.
4. Adze, bone; l. 90, w. 35, t. 31. G6-220. Area A. Baghdad.
5. Inlay, bone; ex. l. 61, w. 21, t. 7. G3-113. IX, 7-O. Baghdad.
6. Tube, bone; l. 55, d. 16. G5-1458. XI, 5J. Baghdad.
7. Tube, bone; l. 80, d. 16. G6-71. XI-A, 5J. Baghdad.
8. Tube, bone; l. 68, d. 17. G4-787. XI, edge of tepe. Baghdad.
9. Tube, bone; ex. l. 37. G3-153A. IX, 8Q. Baghdad.
10. Tube, bone, bitumen inlay; ex. l. 55, w. 20. G3-153B. IX, 8Q. Baghdad.
11. Playing pipe, bone; ex. l. 50, d. 8. G6-531. XVI, 4K. 37-16-402.
12. Playing pipe, bone; ex. l. 106, w. 22, t. 14. G6-262. XII, 4J. 37-16-187. (=Plate XCIX.c, No. 2.)
13. Playing pipe, bone; ex. l. 109, w. 23, t. 12. G6-543. XV, 5M. 37-16-386. (=Plate XCIX.d, No. 1.)
14. Playing pipe, bone; ex. l. 105, w. 25. G6-21. XII, 5Q. 37-16-188. (=Plate XCIX.d, No. 2.)
15. Playing pipe, bone; l. 165, w. 21. G6-590. XII, 11M, Locus G36-171, grave. Baghdad. (=Plate XCIX.d, No. 3.)

PLATE CLXXXII

1. Button, copper; d. 13, h. 5. G6-382. XII, 6G, urn burial, locus number not specified. Baghdad.

ABBREVIATIONS

- AAA.: *Annals of Archaeology and Anthropology*, Liverpool.
- al-'Ubad.: Hall, H. R. and Woolley, C. L., *Ur Excavations*, vol. I: *Al-'Ubad*, Oxford, 1927.
- AMI.: *Archaeologische Mitteilungen aus Iran*, ed. Ernst Herzfeld, Berlin.
- Ar.: Mallowan, M. E. L. and Rose, J. Cruickshank, *Prehistoric Assyria: The Excavations at Tall Arpachiyah*, London, 1935.
- BASOR.: *Bulletin of the American Schools of Oriental Research*, New Haven, Conn.
- CSEI.: McCown, Donald E., *The Comparative Stratigraphy of Early Iran*, Oriental Institute Studies in Ancient Oriental Civilization, No. 23, Chicago, Ill., 1942.
- Halaf: von Oppenheim, Freiherr Max, *Der Tell Halaf*, Leipzig, 1931.
- ILN.: *Illustrated London News*, London.
- JAOS.: *Journal of the American Oriental Society*, New Haven, Conn.
- MCB.: Mallowan, M. E. L., "The Excavations at Tall Chagar Bazar," *Iraq*, vol. III, Part 1, pp. 1-59, London, 1936.
- MJ.: *The Museum Journal*, University Museum, Philadelphia, Pa.
- SA.: *The Scientific American*, New York, N. Y.
- SR.: *Smithsonian Report*, Smithsonian Institution, Washington, D. C.
- TG.: Speiser, E. A., *Excavations at Tepe Gawra*, vol. I, Philadelphia, Pa., 1935.
- TH.: Schmidt, Erich F., *Excavations at Tepe Hissar, Damghan*, Philadelphia, Pa., 1937.
- UC.: Woolley, C. L., *Ur Excavations*, vol. II. *The Royal Cemetery*, Oxford, 1934.
- US.: Legrain, L., *Ur Excavations*, vol. III: *Archaic Seal-Impressions*, Oxford, 1936.
- UVB.: "Vorläufiger Bericht über die von der Notgemeinschaft der deutschen Wissenschaft in Uruk unternommenen Ausgrabungen," Preussische Akademie der Wissenschaften, philos.-hist. Klasse, Berlin.
- Other works and periodicals are cited in full.

PROVERBS

1. The fear of the Lord is the beginning of wisdom.
2. A prudent man will keep his knowledge hidden,
but a fool will brag of his wisdom.
3. By the fruit of the tree you shall know him,
by the produce of the vine you shall know him.
4. The words of the mouth are like silver,
but the heart is as gold.
5. The words of the wise are like honey,
but the words of the fool are like vinegar.
6. The words of the wise are like silver,
but the words of the fool are like lead.
7. The words of the wise are like silver,
but the words of the fool are like lead.
8. The words of the wise are like silver,
but the words of the fool are like lead.
9. The words of the wise are like silver,
but the words of the fool are like lead.
10. The words of the wise are like silver,
but the words of the fool are like lead.

11. The words of the wise are like silver,
but the words of the fool are like lead.
12. The words of the wise are like silver,
but the words of the fool are like lead.
13. The words of the wise are like silver,
but the words of the fool are like lead.
14. The words of the wise are like silver,
but the words of the fool are like lead.
15. The words of the wise are like silver,
but the words of the fool are like lead.
16. The words of the wise are like silver,
but the words of the fool are like lead.
17. The words of the wise are like silver,
but the words of the fool are like lead.
18. The words of the wise are like silver,
but the words of the fool are like lead.
19. The words of the wise are like silver,
but the words of the fool are like lead.
20. The words of the wise are like silver,
but the words of the fool are like lead.

21. The words of the wise are like silver,
but the words of the fool are like lead.

22. The words of the wise are like silver,
but the words of the fool are like lead.

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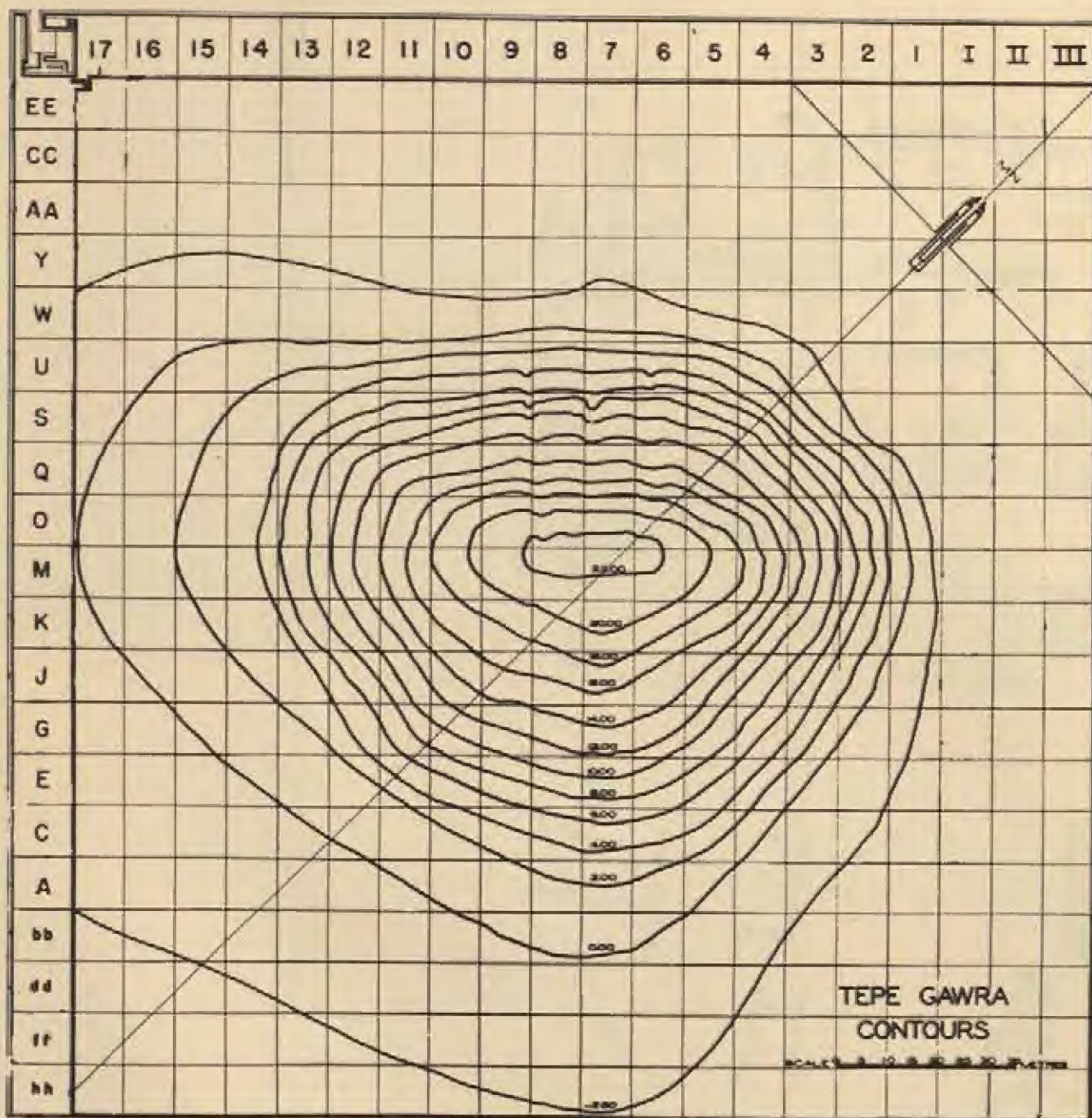
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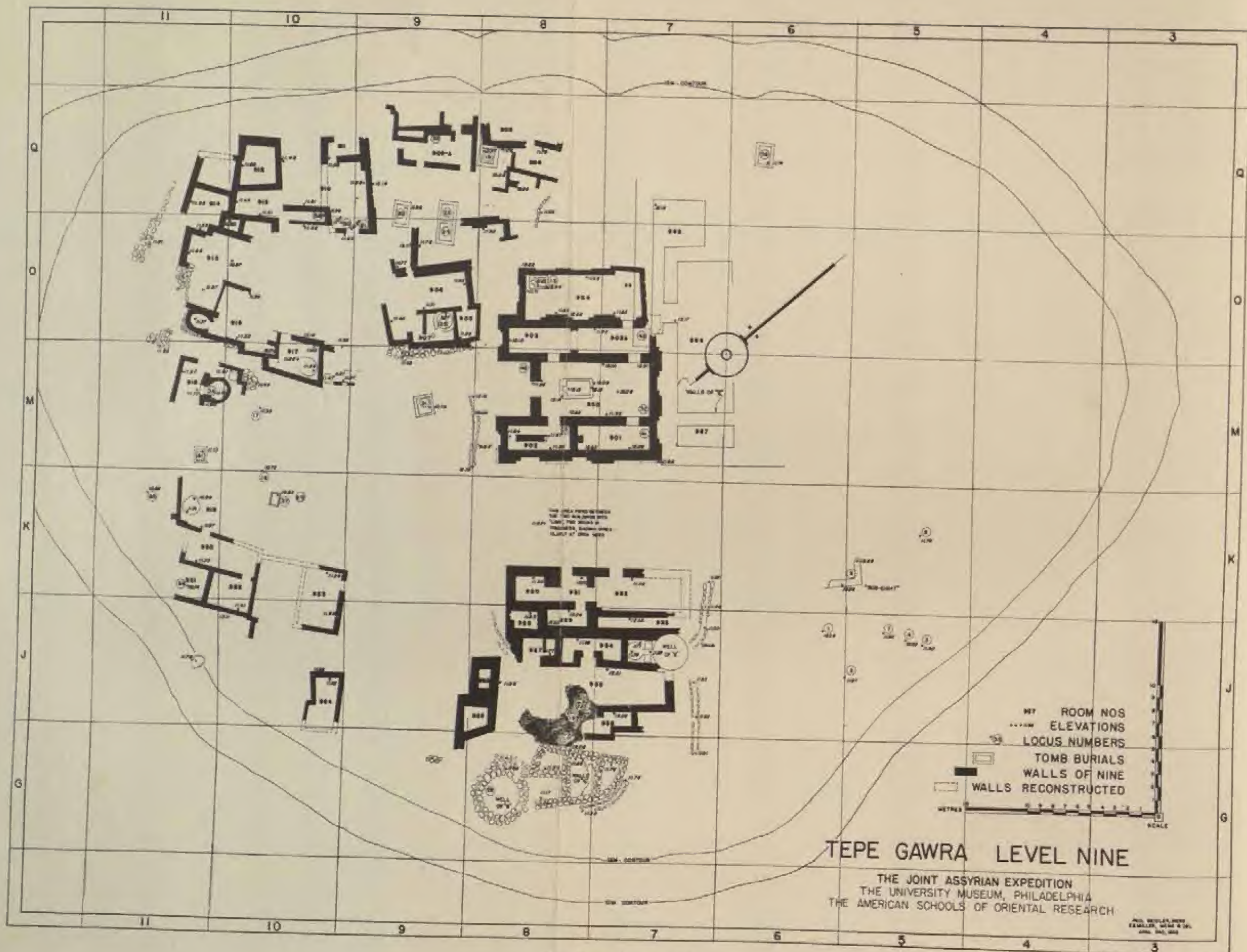
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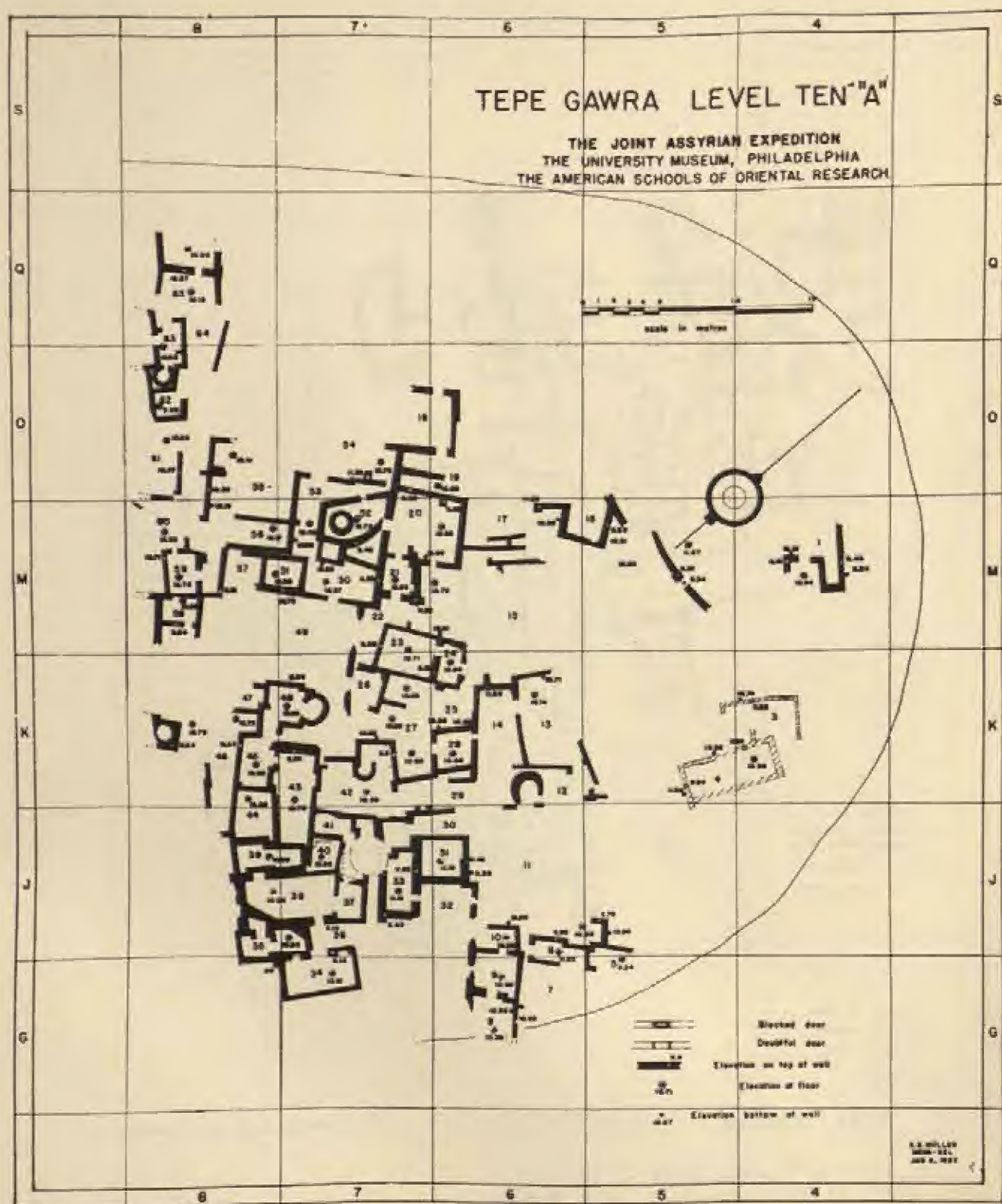
Contour map of Tepe Gawra.



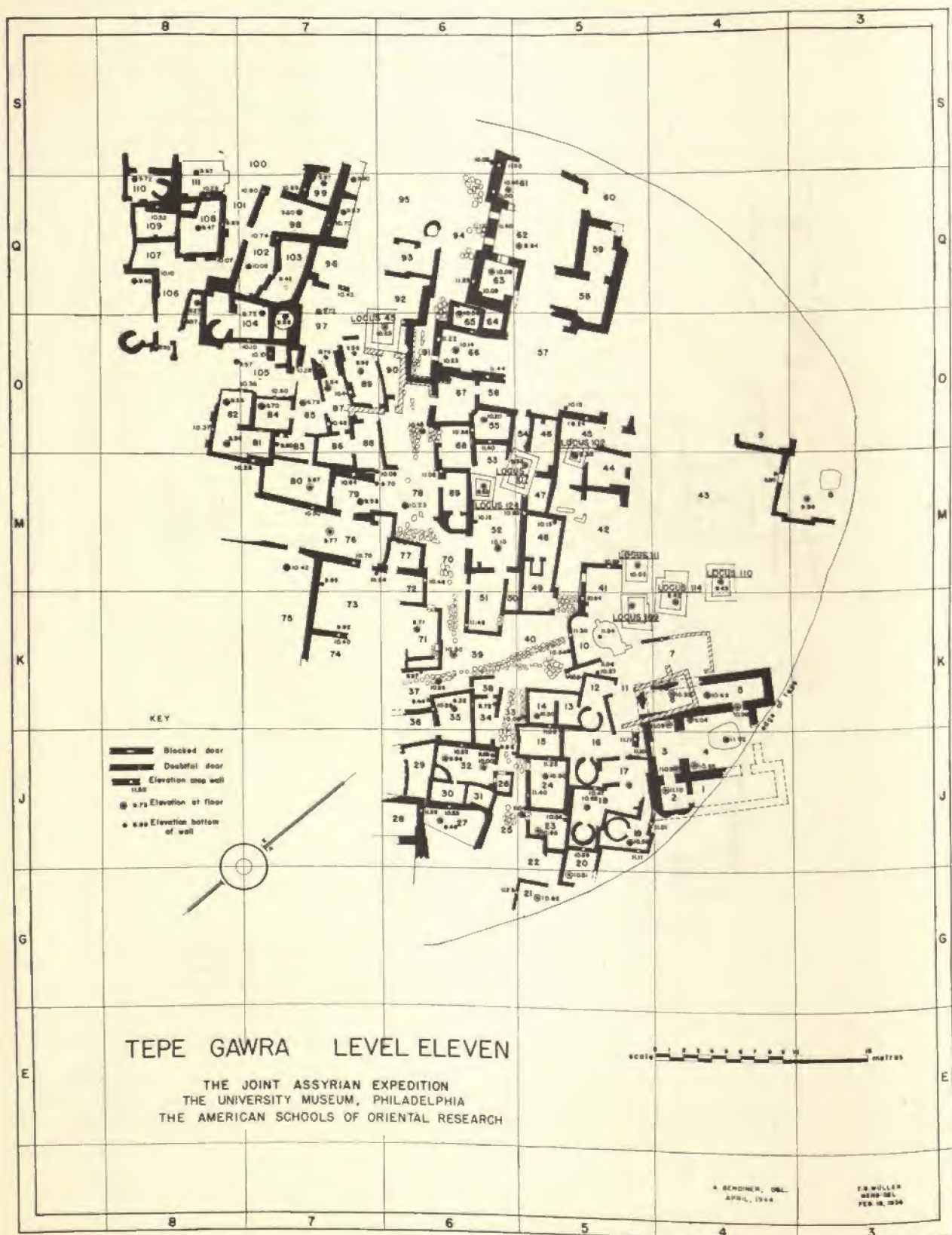


Tepe Gawra, Stratum IX.

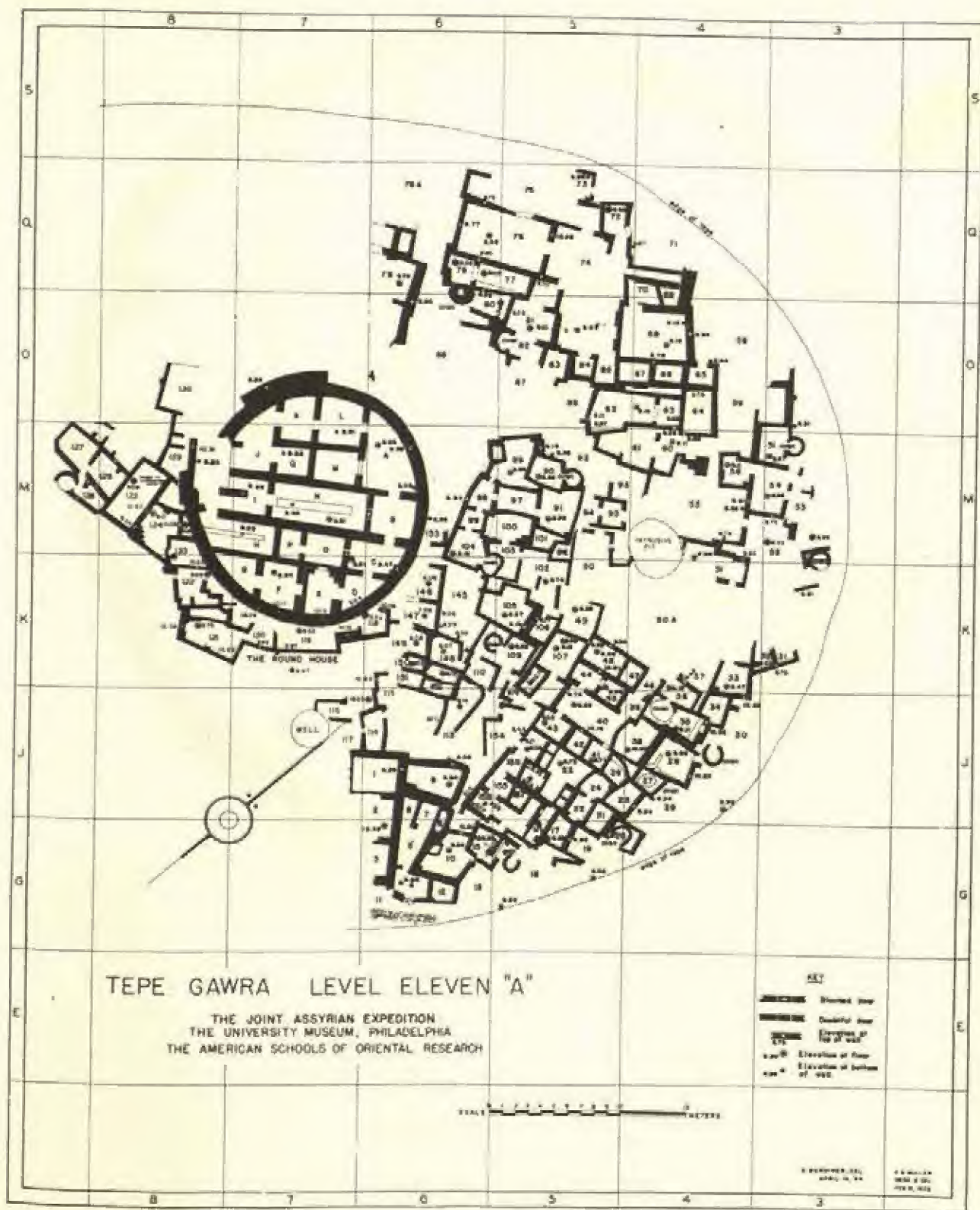
Tepe Gawra, Stratum X.



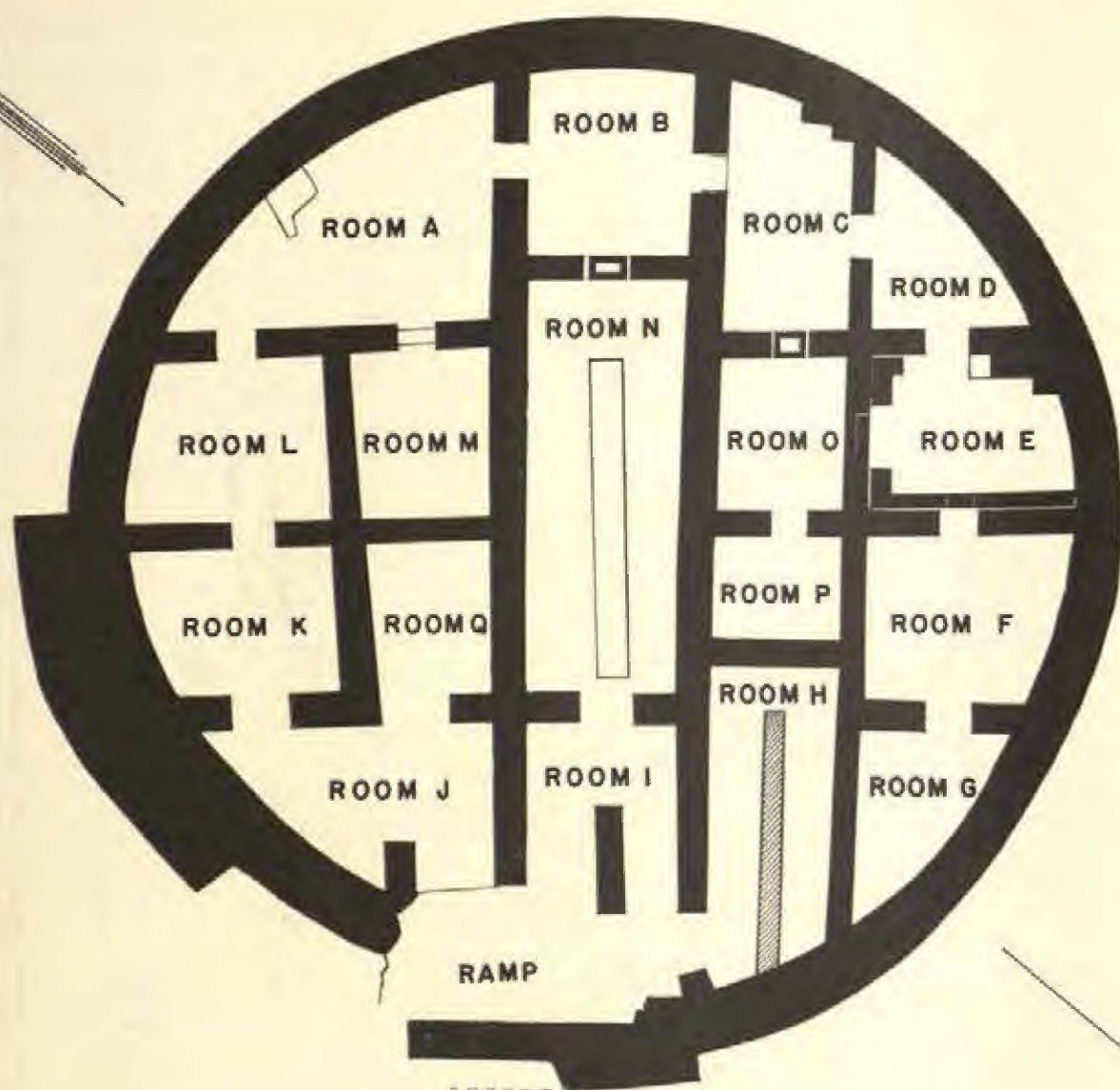
Tepe Gawra, Stratum X-A.



Tepe Gawra, Stratum XI.



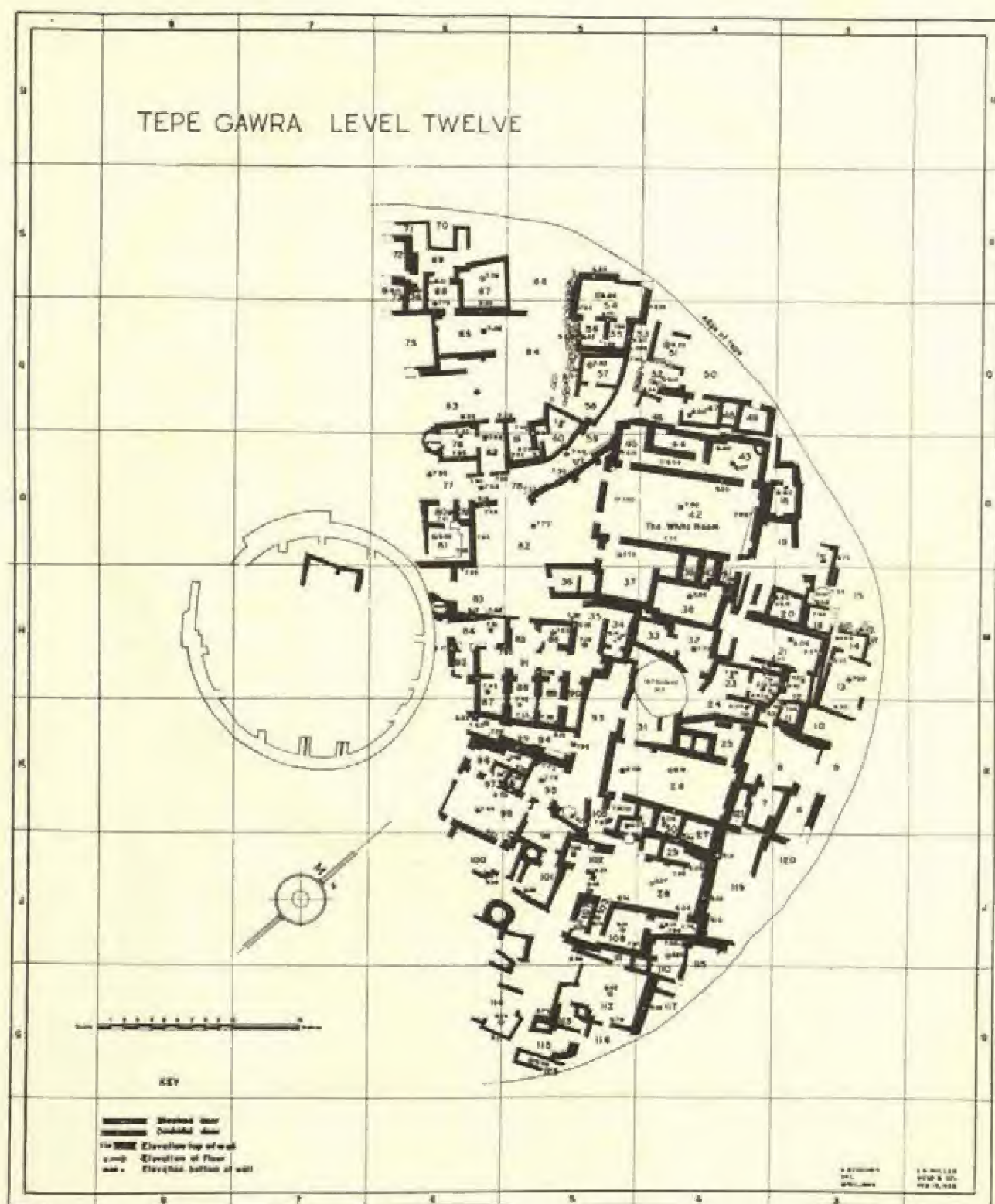
Tepe Gawra, Stratum XI-A.



THE ROUND HOUSE TEPE GAWRA

STRATUM XI-A

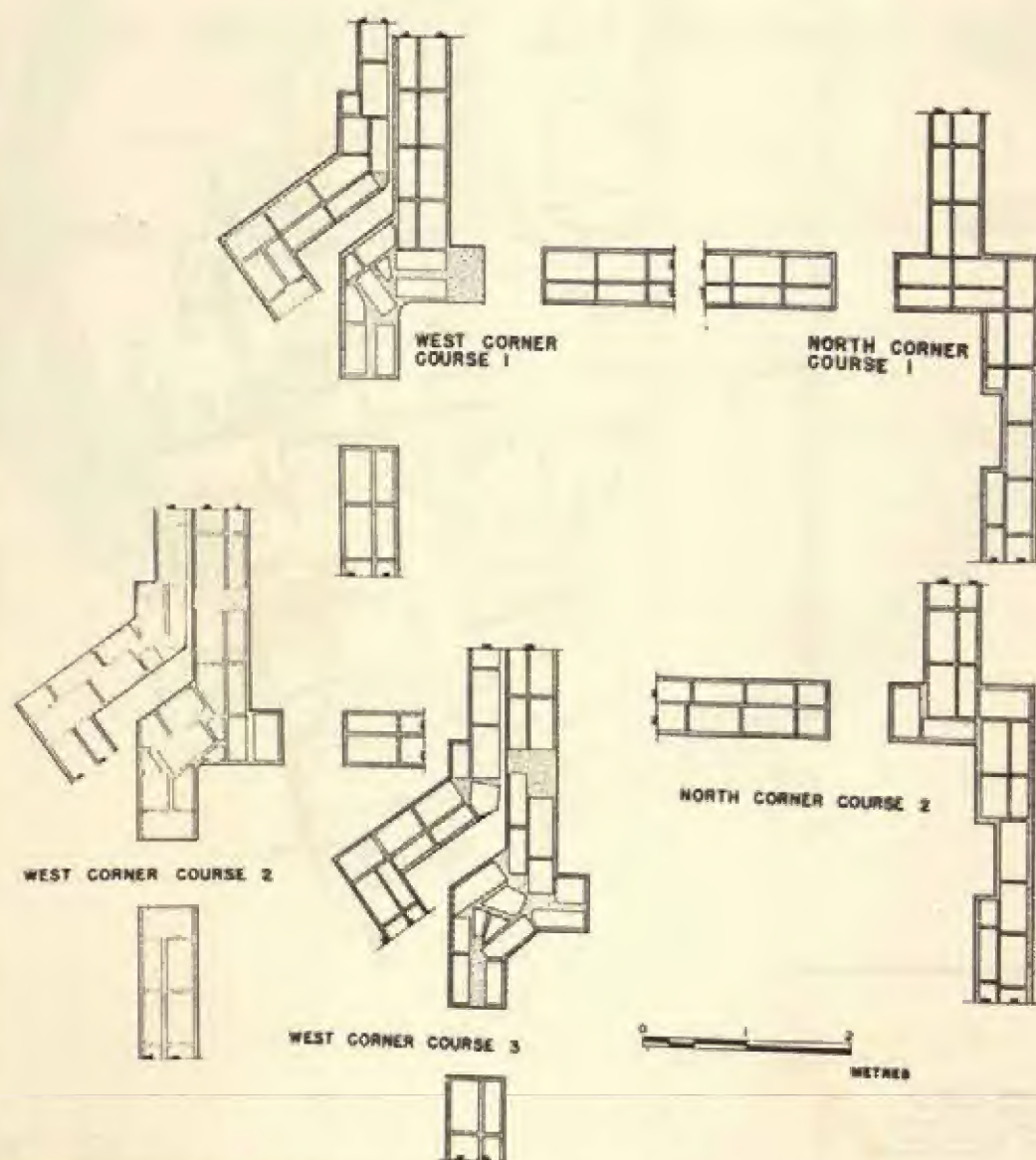




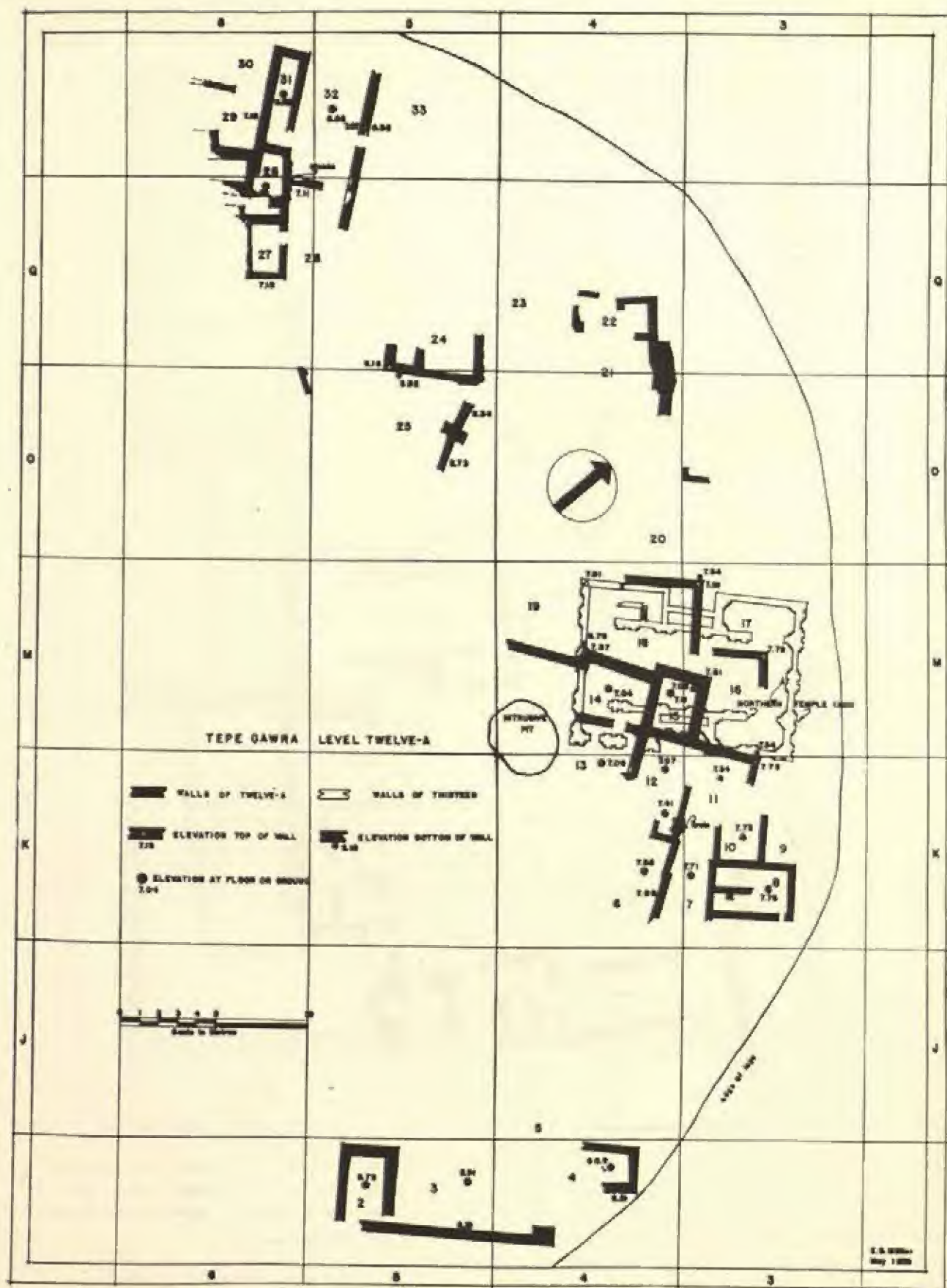
Tepe Gawra, Stratum XII.

BONDING DETAILS OF THE WHITE ROOM

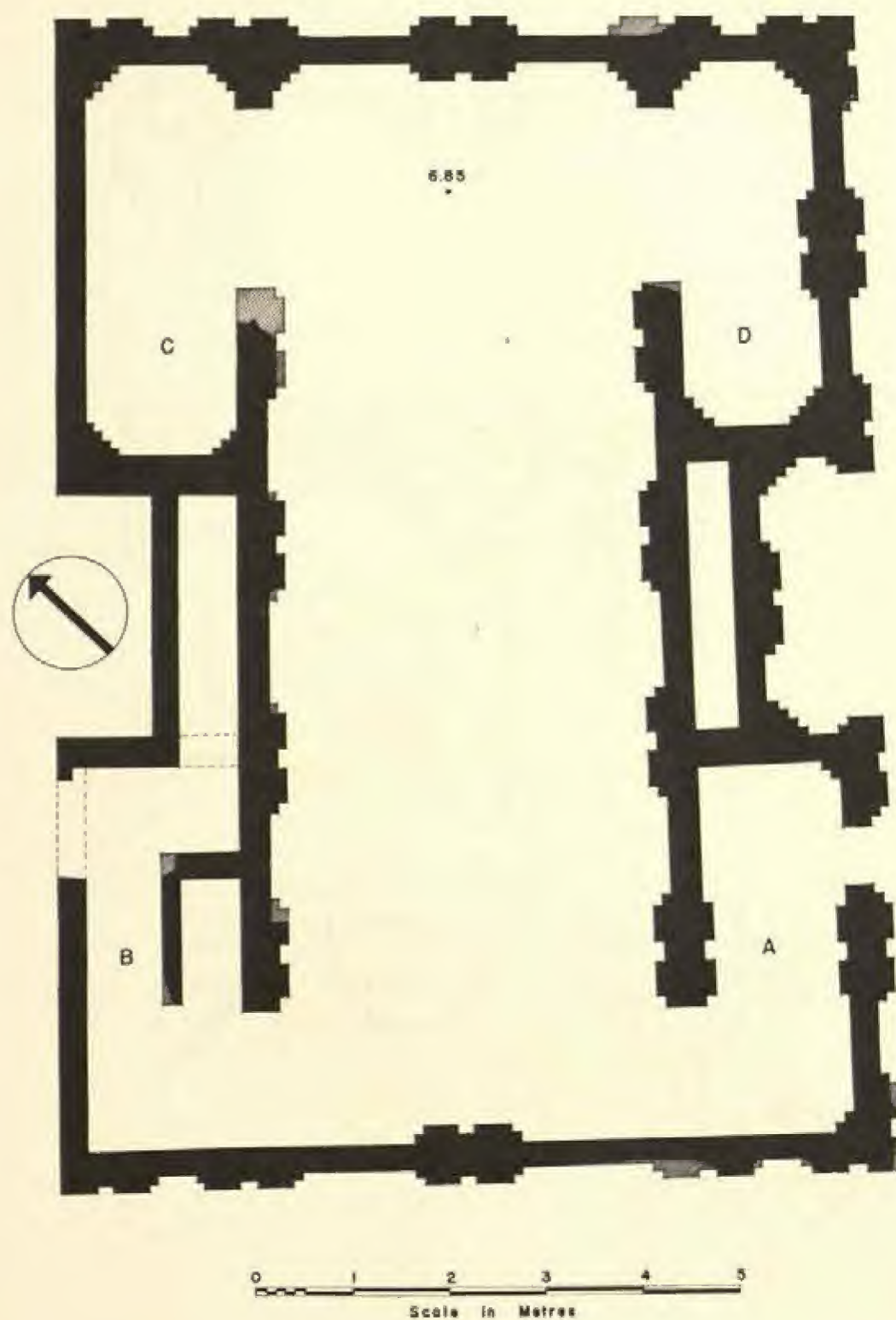
STRATUM XII



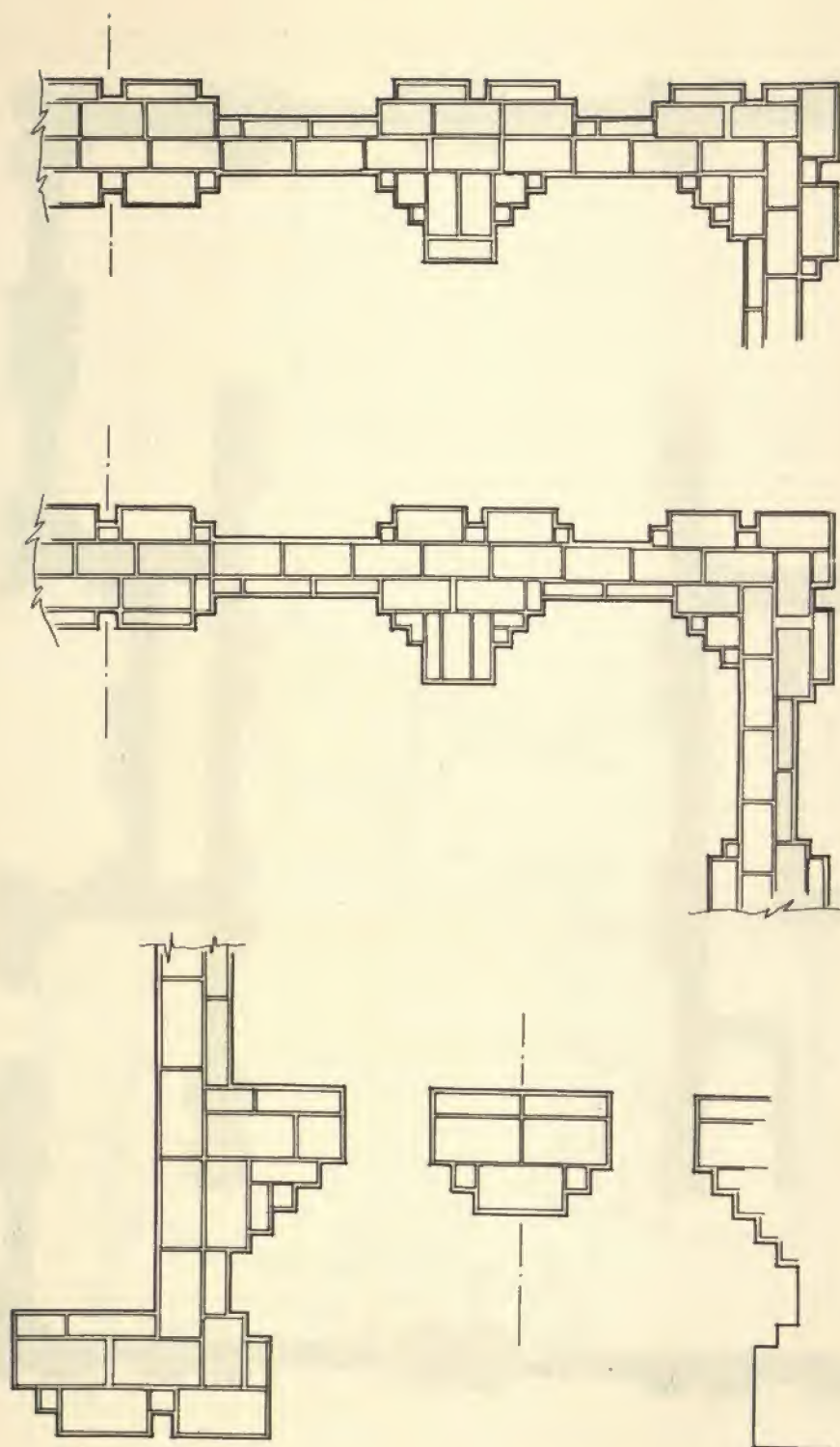
Bonding details of the White Room, Stratum XII.



Tepe Gawra, Stratum XII-A.

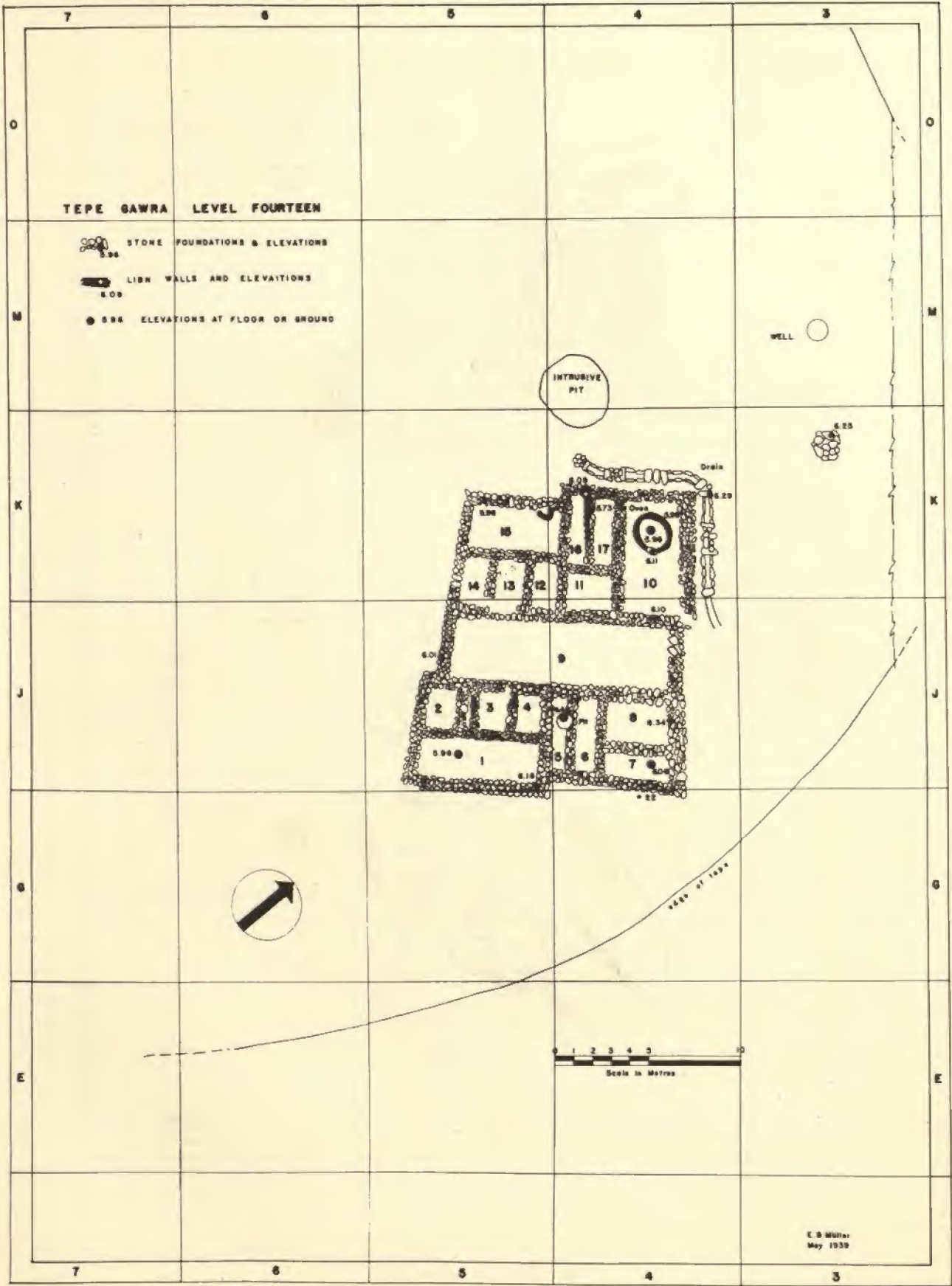


The Northern Temple of Stratum XIII.

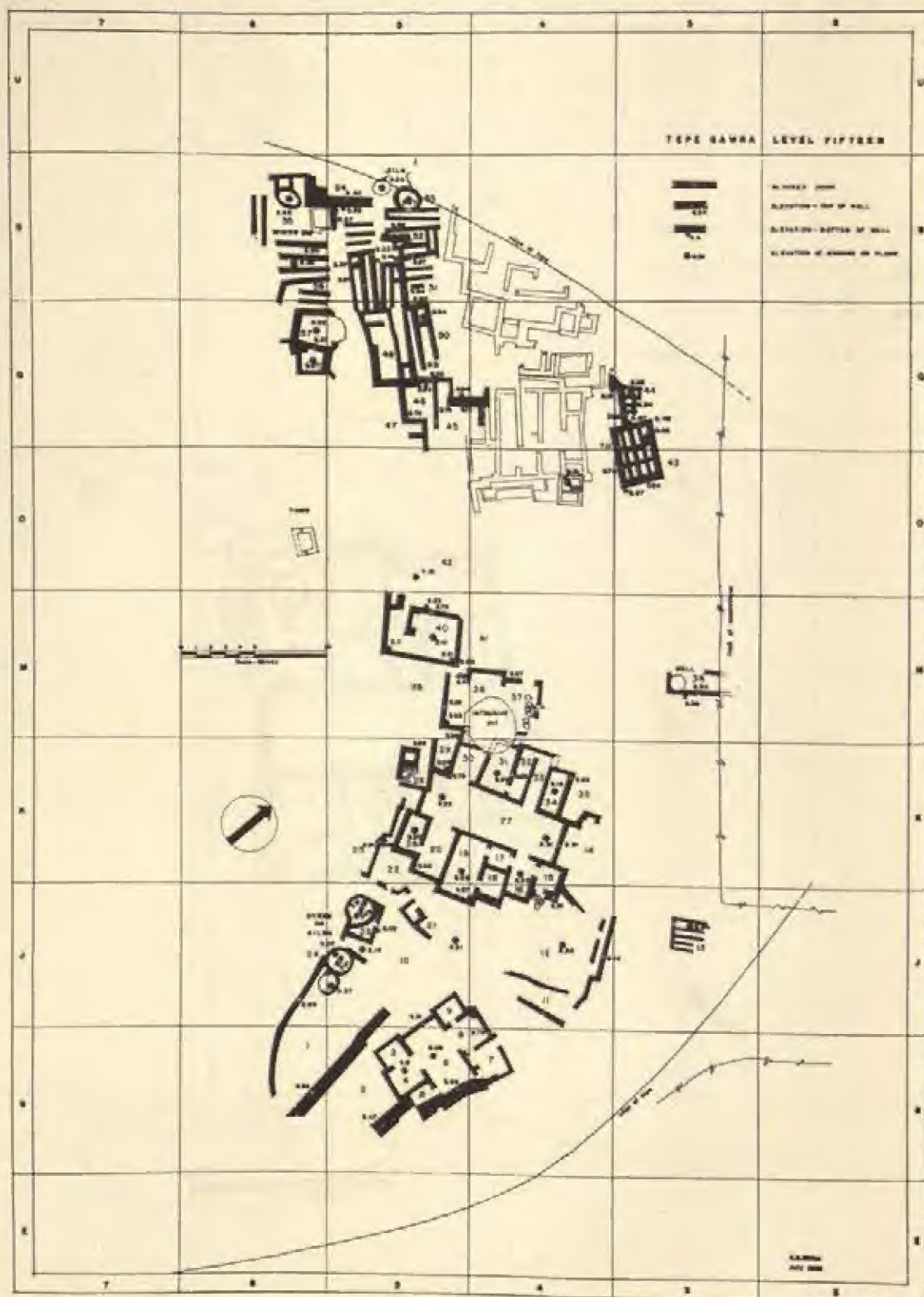


Bonding details in the Northern and Central Temples of Stratum XIII.

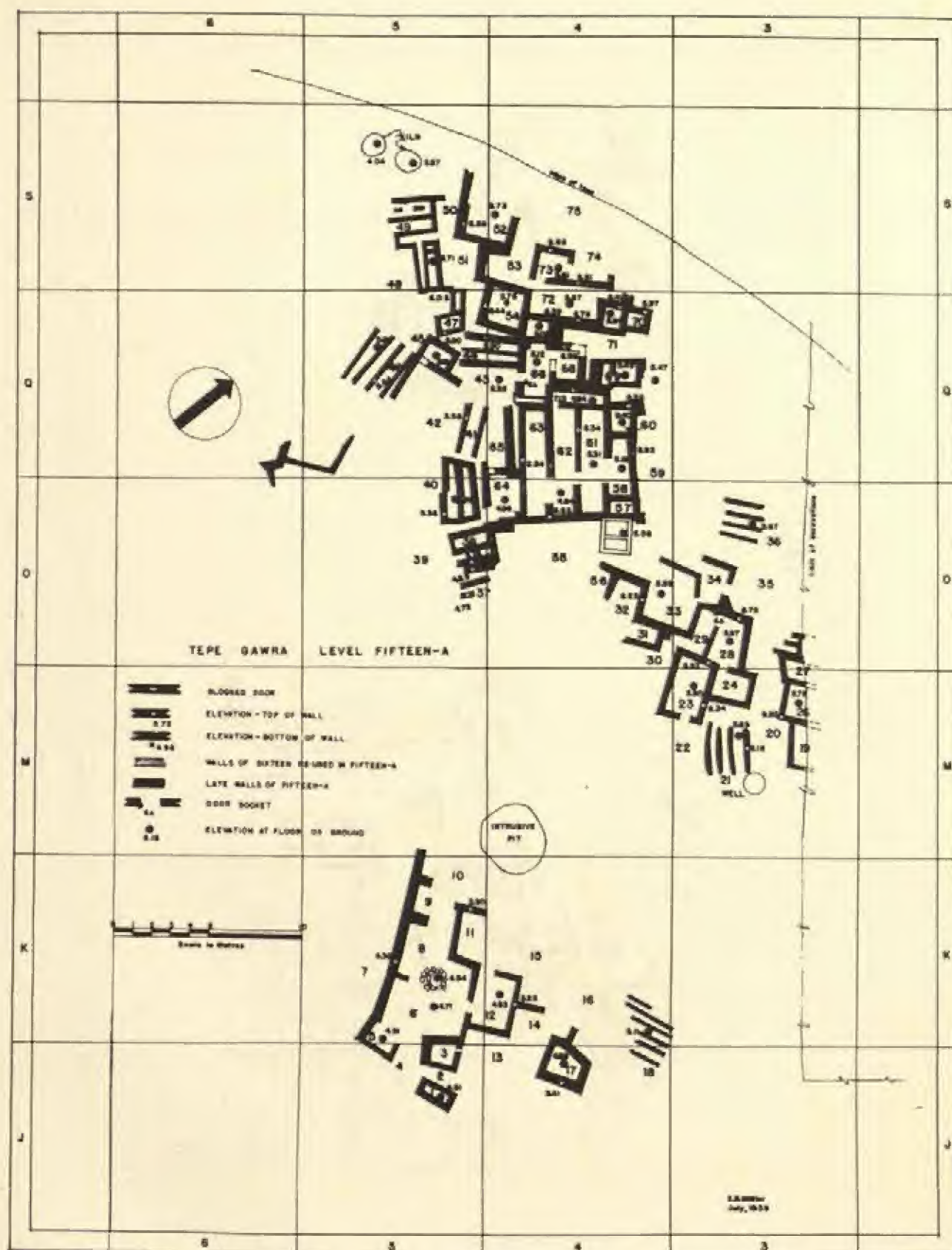




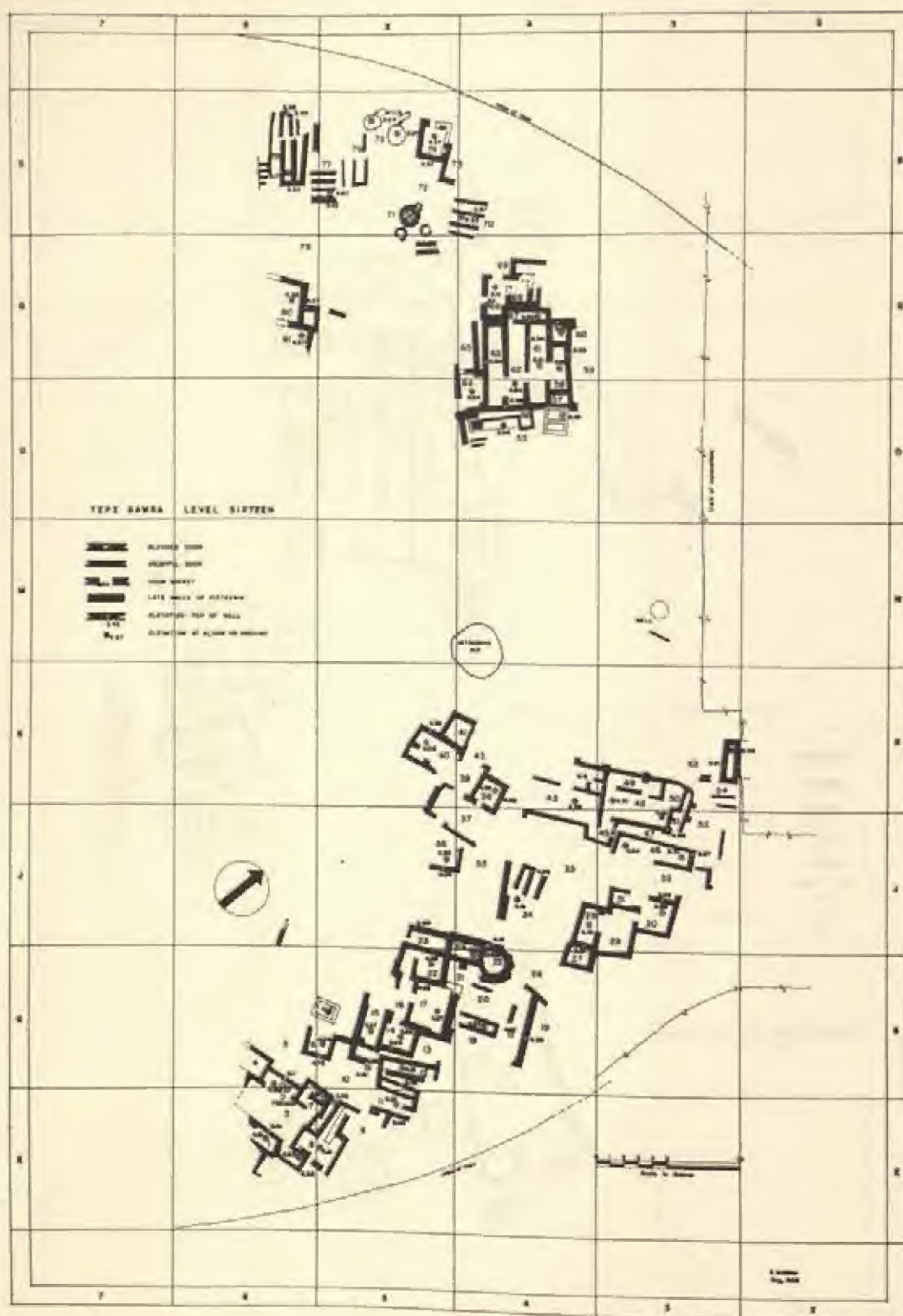
Tepe Gawra, Stratum XIV.



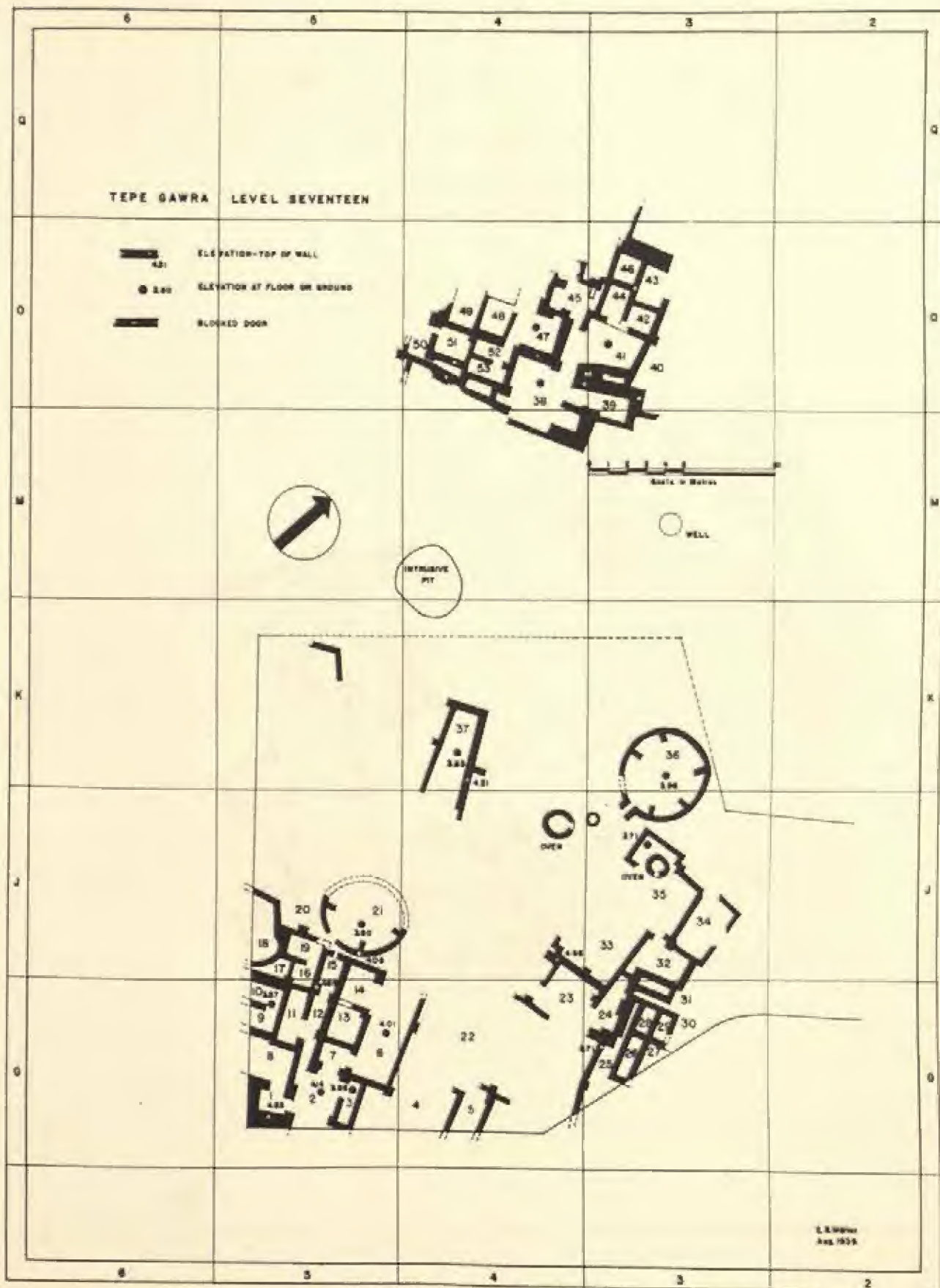
Tepe Gawra, Stratum XV.



Tepe Gawra, Stratum XV-A.



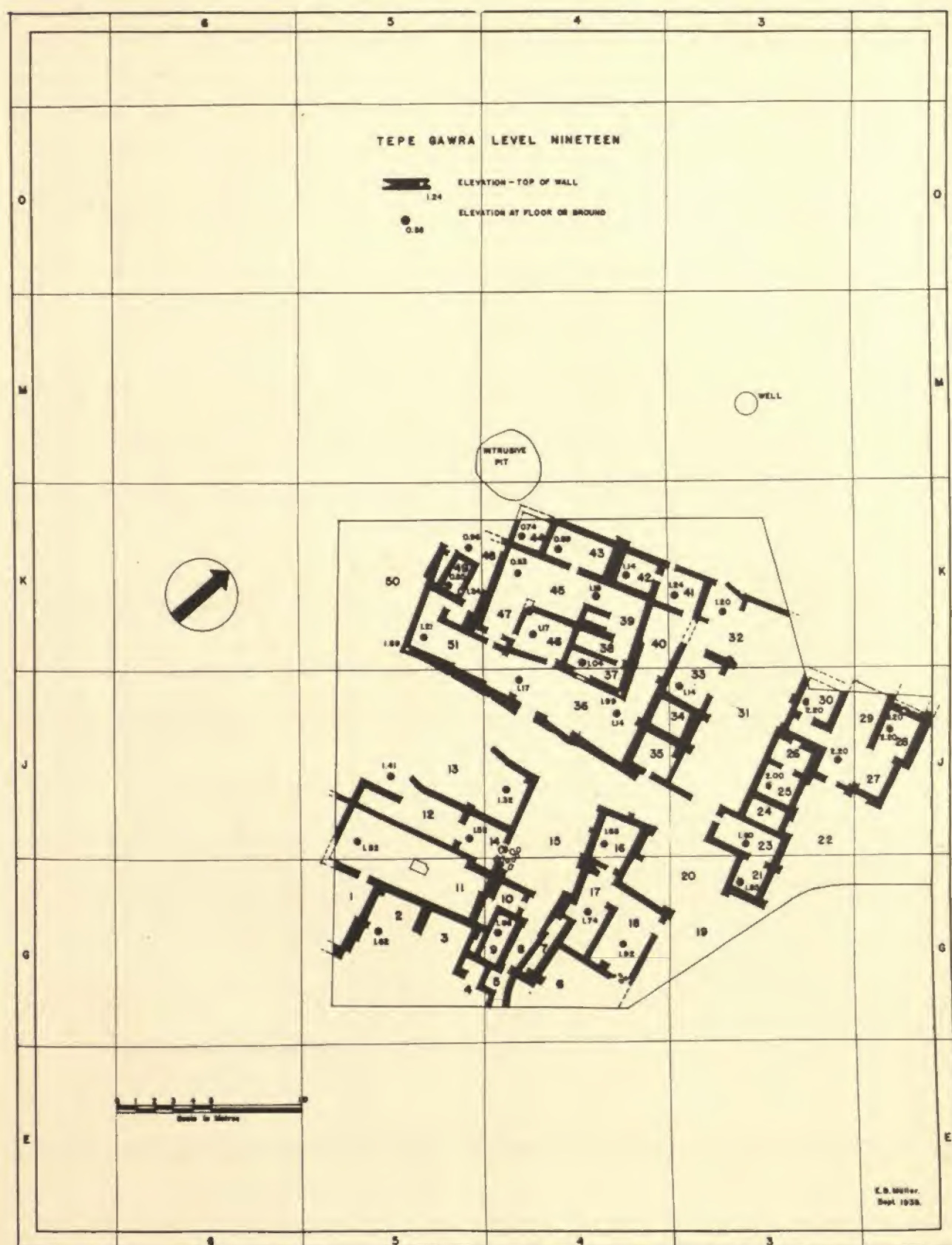
Tepe Gawra, Stratum XVI.



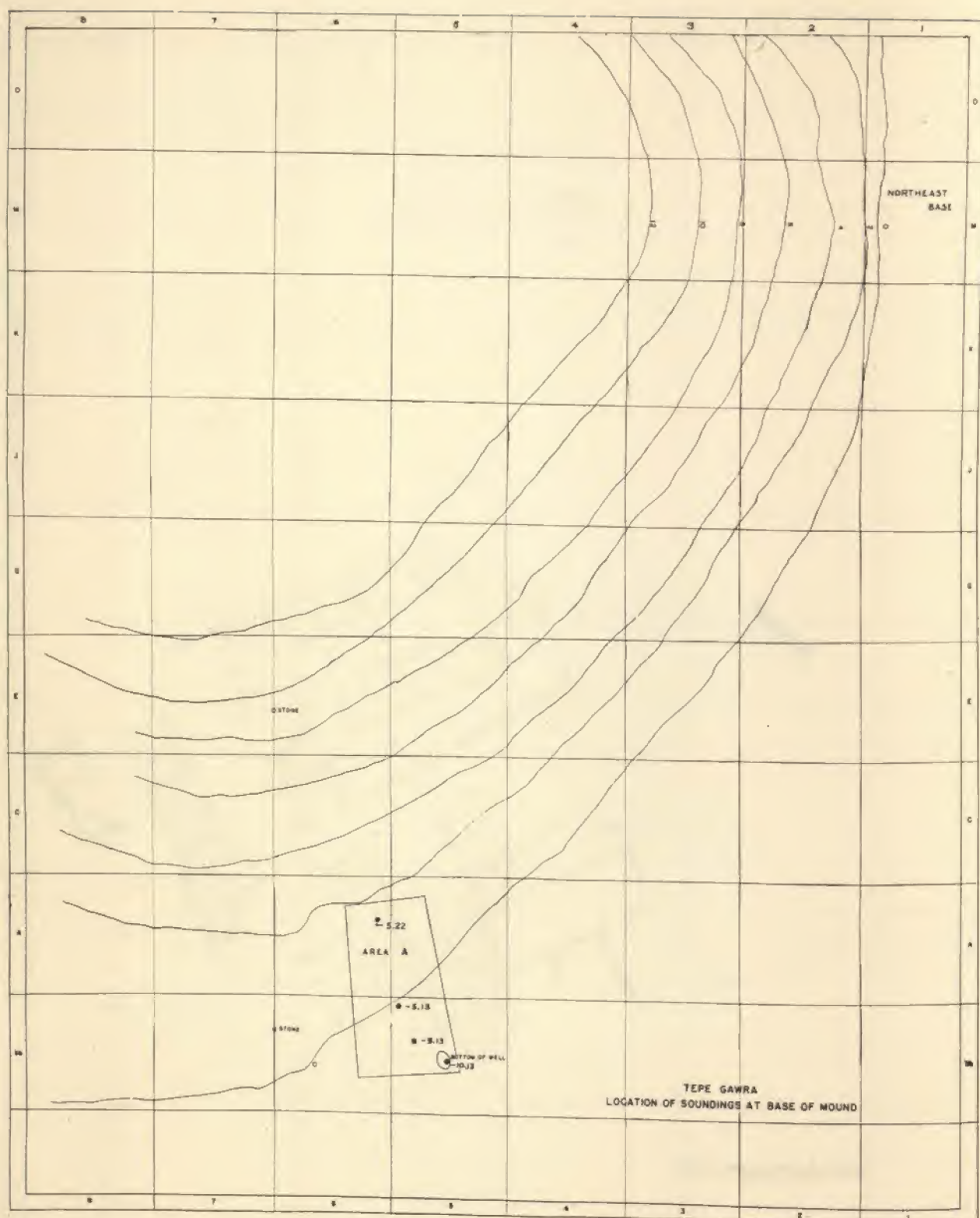
Tepe Gawra, Stratum XVII.



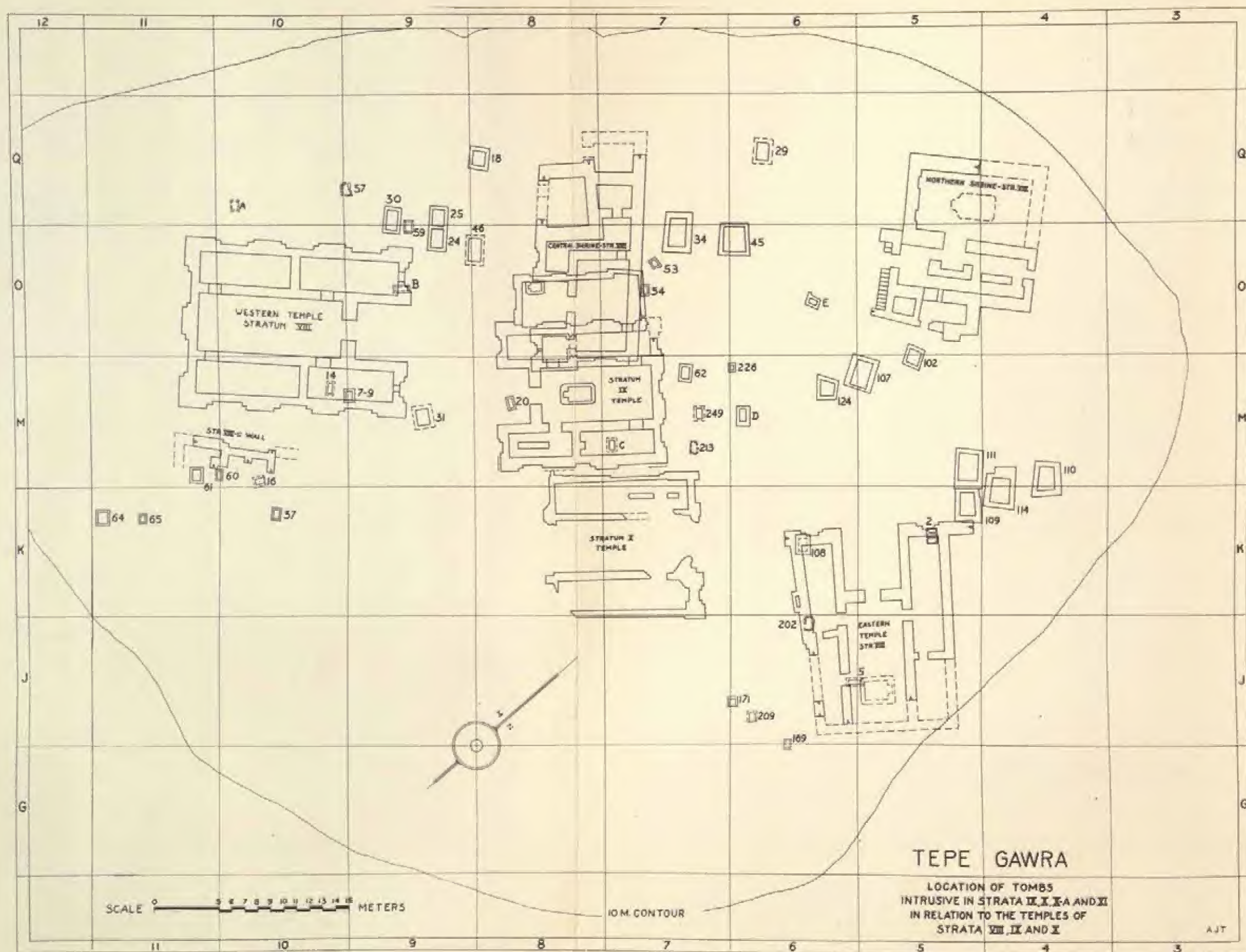
Tepe Gawra, Stratum XVIII.



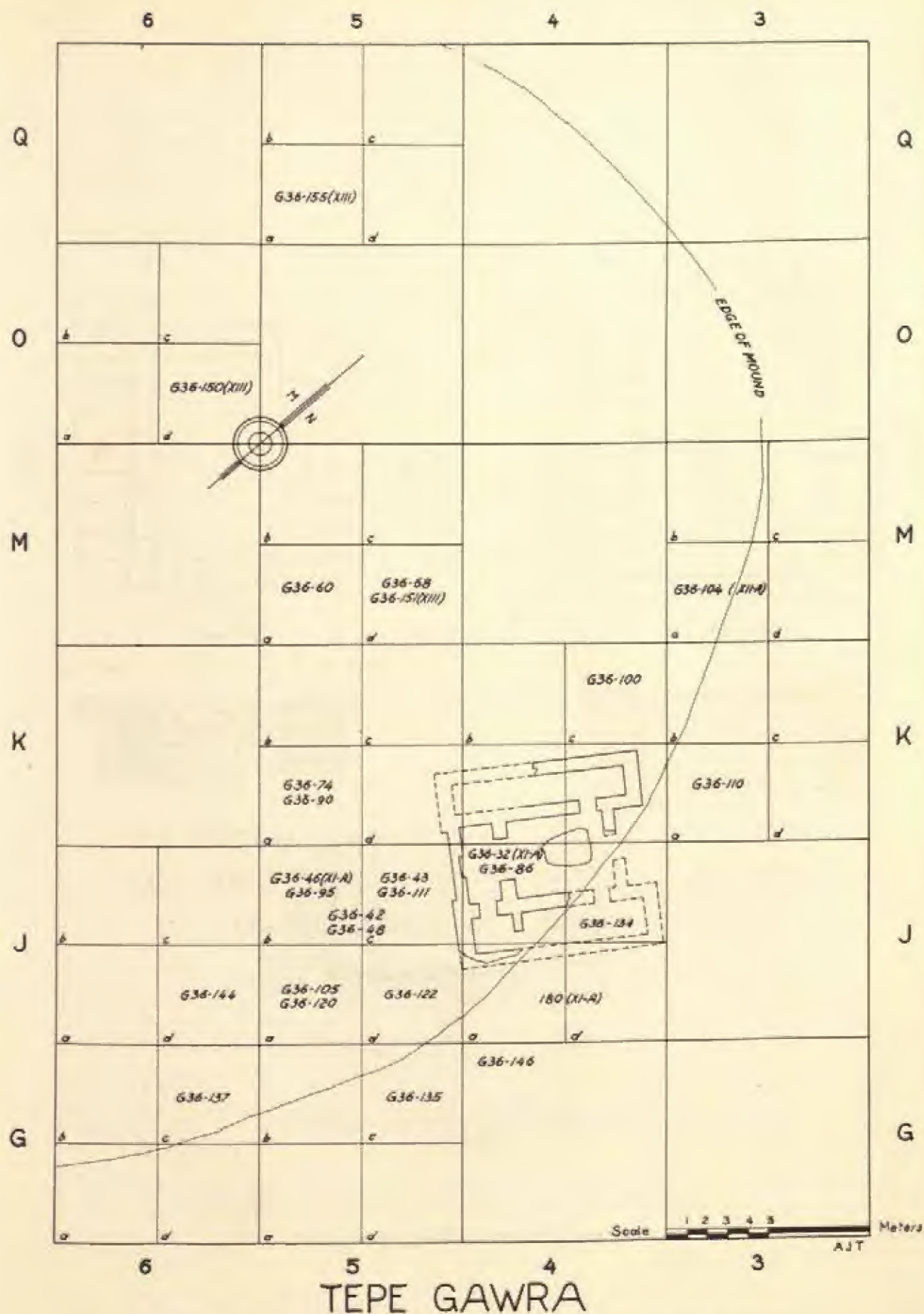
Tepe Gawra, Stratum XIX.



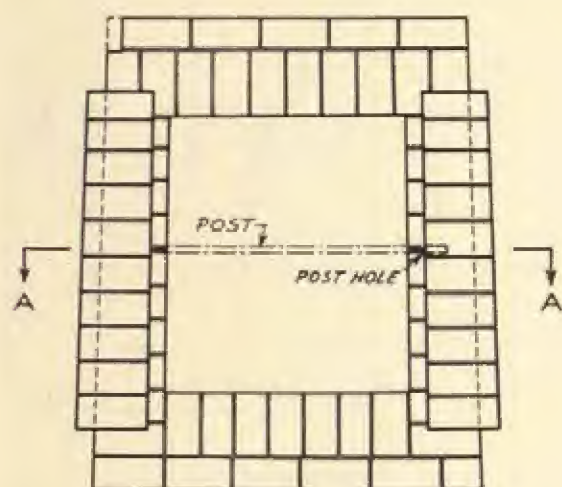
Location of soundings at the base of the mound.



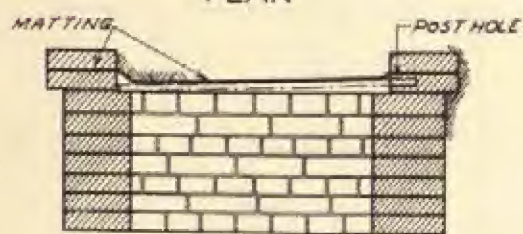
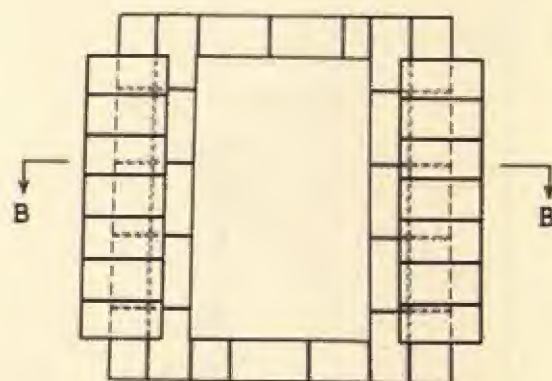
Location of tombs intrusive into Strata IX-XI in relation to the Temples of Strata VIII, IX and X.



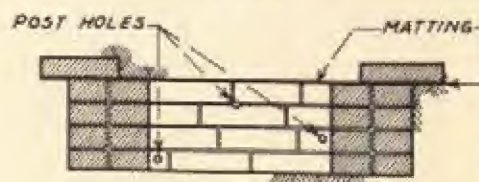
Location of tombs intrusive into Strata XI-A—XIII in relation to the Stratum XI Terrace.



PLAN

SECTION A-A
TOMB 45

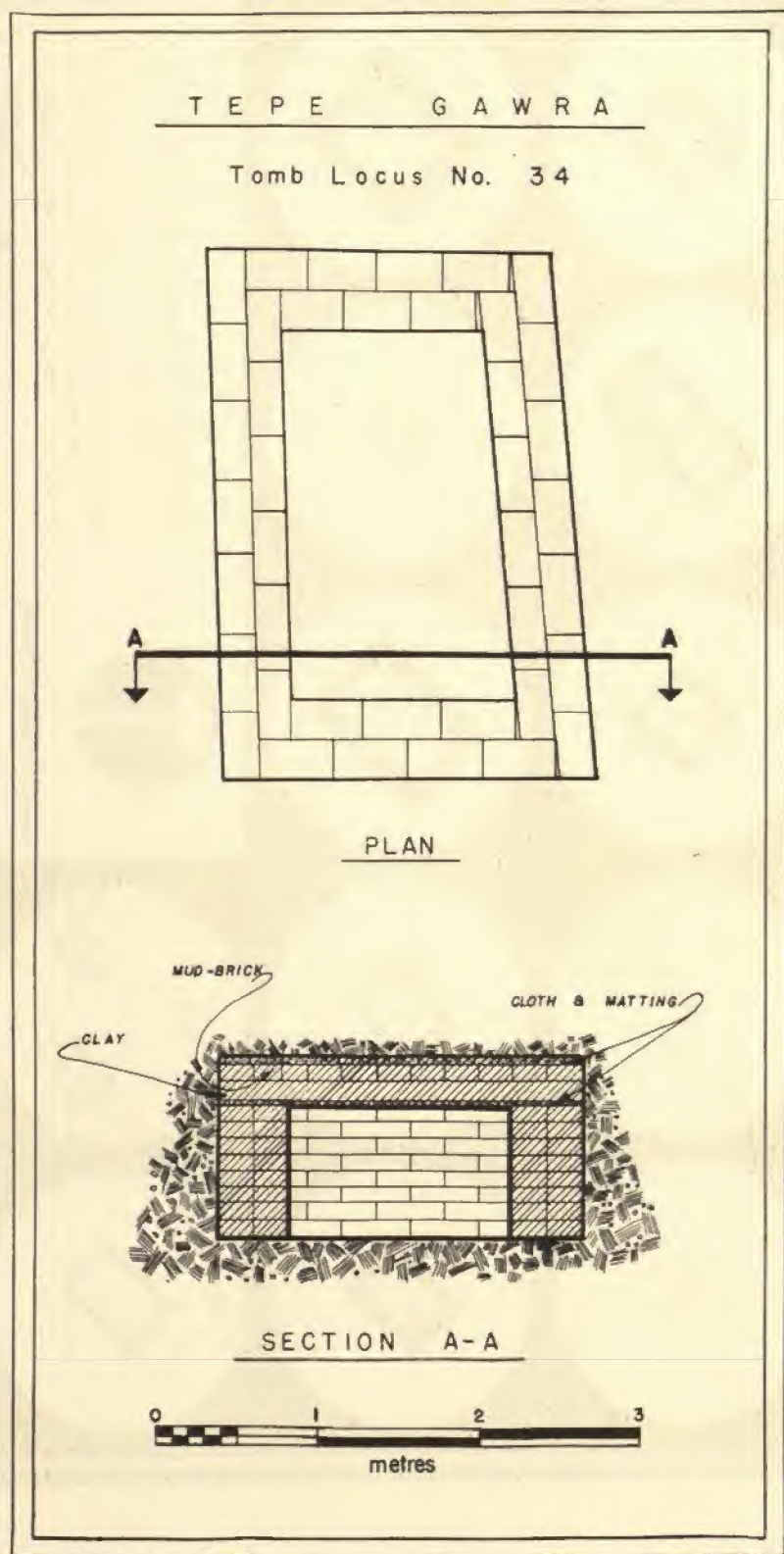
PLAN

SECTION B-B
TOMB 107

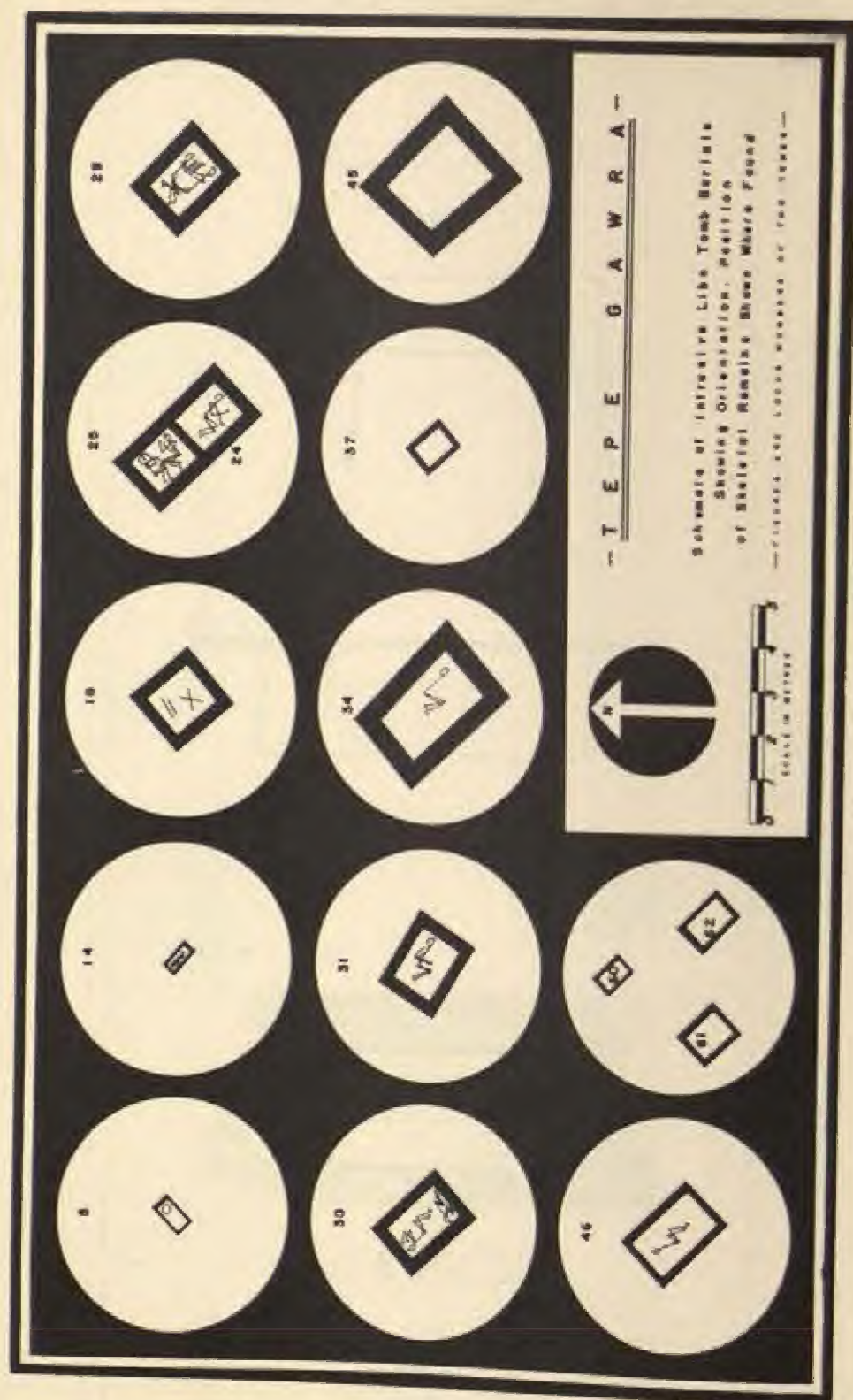
DETAILS OF CONSTRUCTION



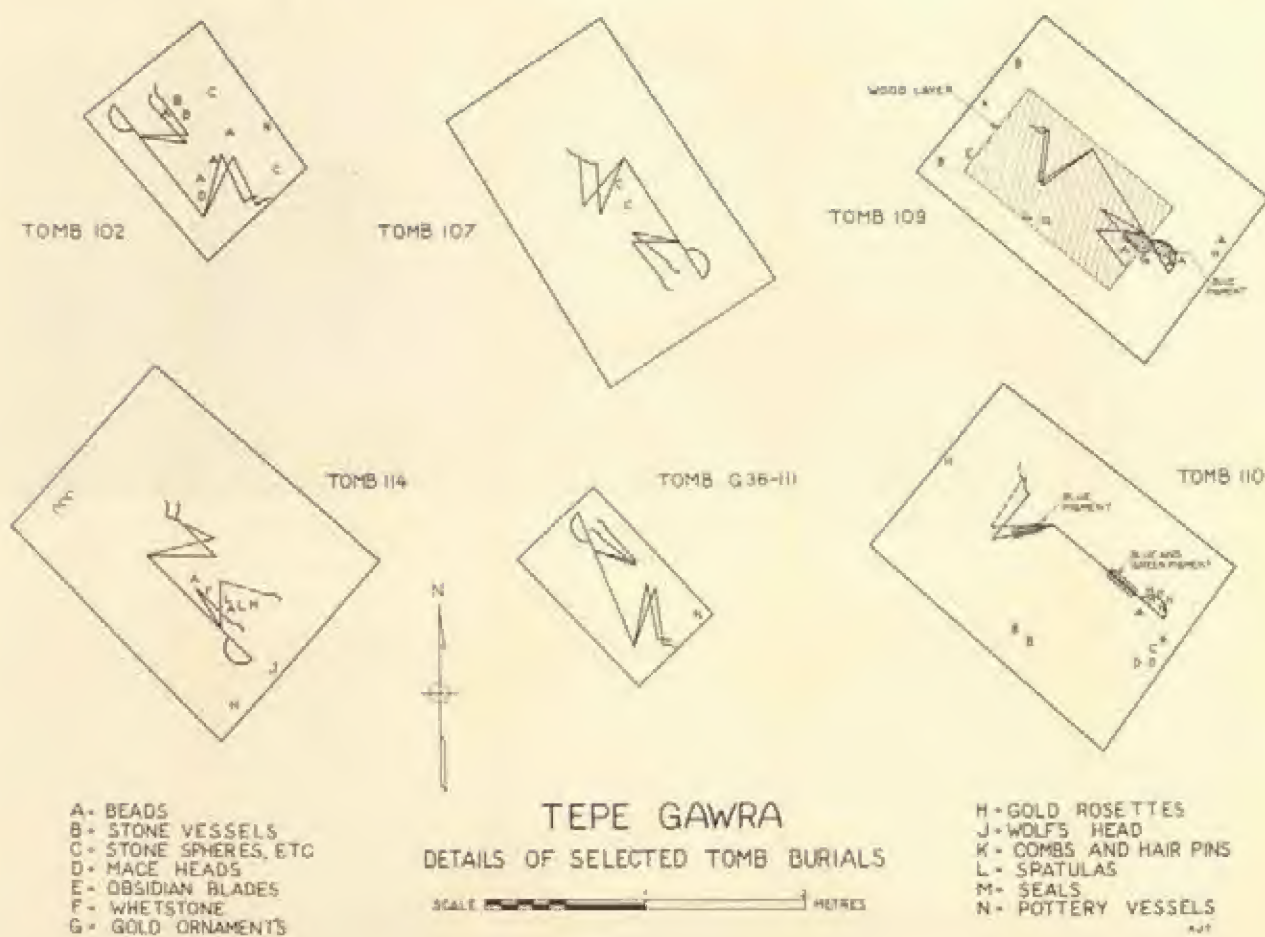
Tomb 34. Details of construction



Plan and section of Tomb 34.



Position of burials in late tombs.



Details of burials in selected tombs.



a. Tepe Gawra, looking northwest. The central cut has exposed Stratum XVII, while the flat area (left) represents Stratum X.



b. Sounding trench approximately at Stratum XII-A. Looking southwest.



a. Podium in the central room, Stratum IX Temple.



b. Bonding of the southwestern wall, Room 903, Stratum IX Temple.



a. Rooms 901 and 902, Stratum IX Temple.



b. Podium in western corner of Room 904, Stratum IX Temple.



a. Oven made of mud-bricks, Stratum X.



b. Stratum XI Temple, looking northeast. The workman bends over the podium in the central chamber.



a. Double entrance to the large building on the northern edge of Stratum XI.
From within Room 62, looking northwest.



b. Room 63 of the same building, Stratum XI, looking southwest.



a. Wattle or reed flooring in Room 61 of the large building on the northern edge of Stratum XI.



b. Stratum XI-A Temple, looking northeast.



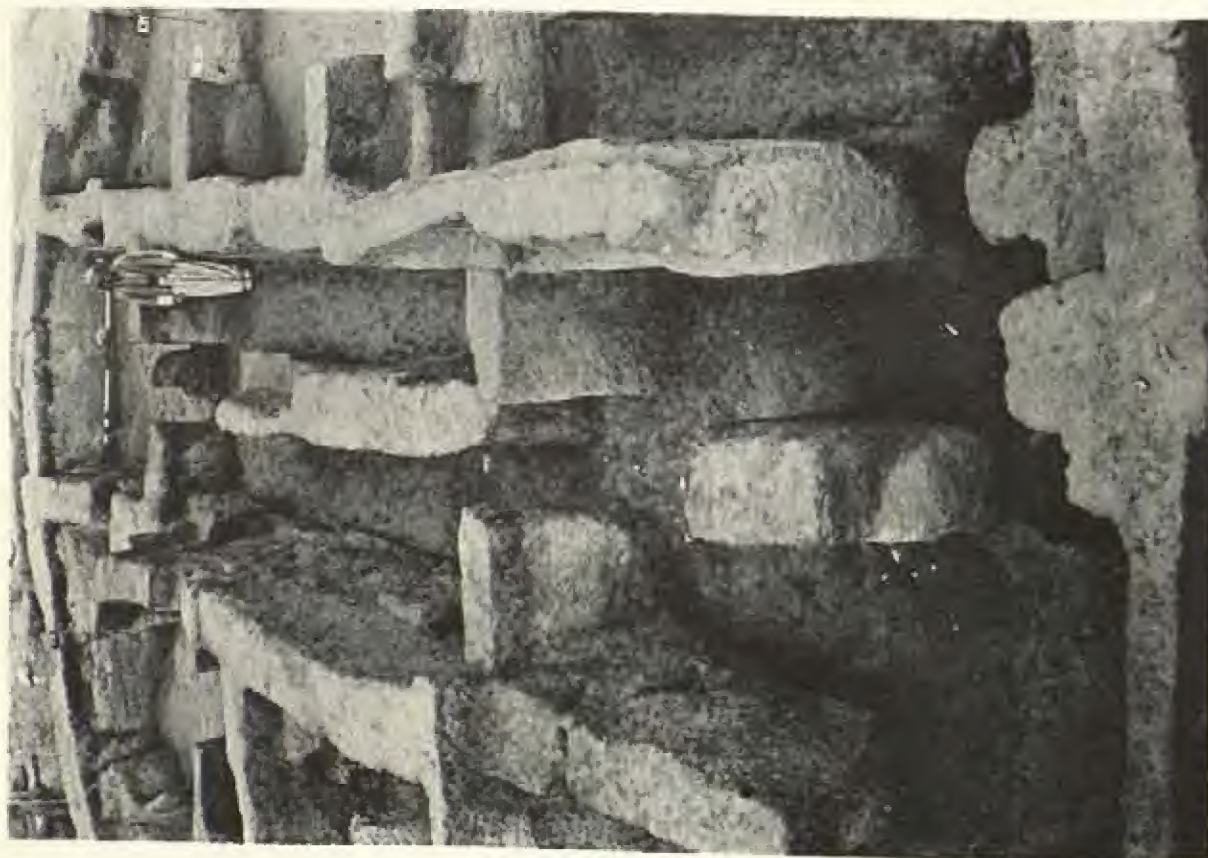
a. Round House of Stratum XI-A, looking southwest. Walls in the right foreground belong to Stratum XII.



b. Southwestern portion of the Stratum XI-A Round House. The ramp has been removed to show its stone foundation (upper left).



b. Ramp of the Stratum XI-A Round House. From Room I, looking west.



a. Rooms I, N, and B of the Stratum XI-A Round House.



a. White Room complex of Stratum XII. Looking northeast.



b. Watchtower (?) of Stratum XII. Rooms 54-56, looking northeast.



a. Skeleton of a child, with stone in back. Square 6-O, Stratum XII.



b. Skull of a saluki from the Stratum XIII Well.



a. Main Court of the Stratum XIII acropolis, looking east. The stone foundations belong to Stratum XIV.



b. Northern Temple, Stratum XIII. Looking north.



a. Detail of central niche in Stratum XIII Central Temple. Looking east.



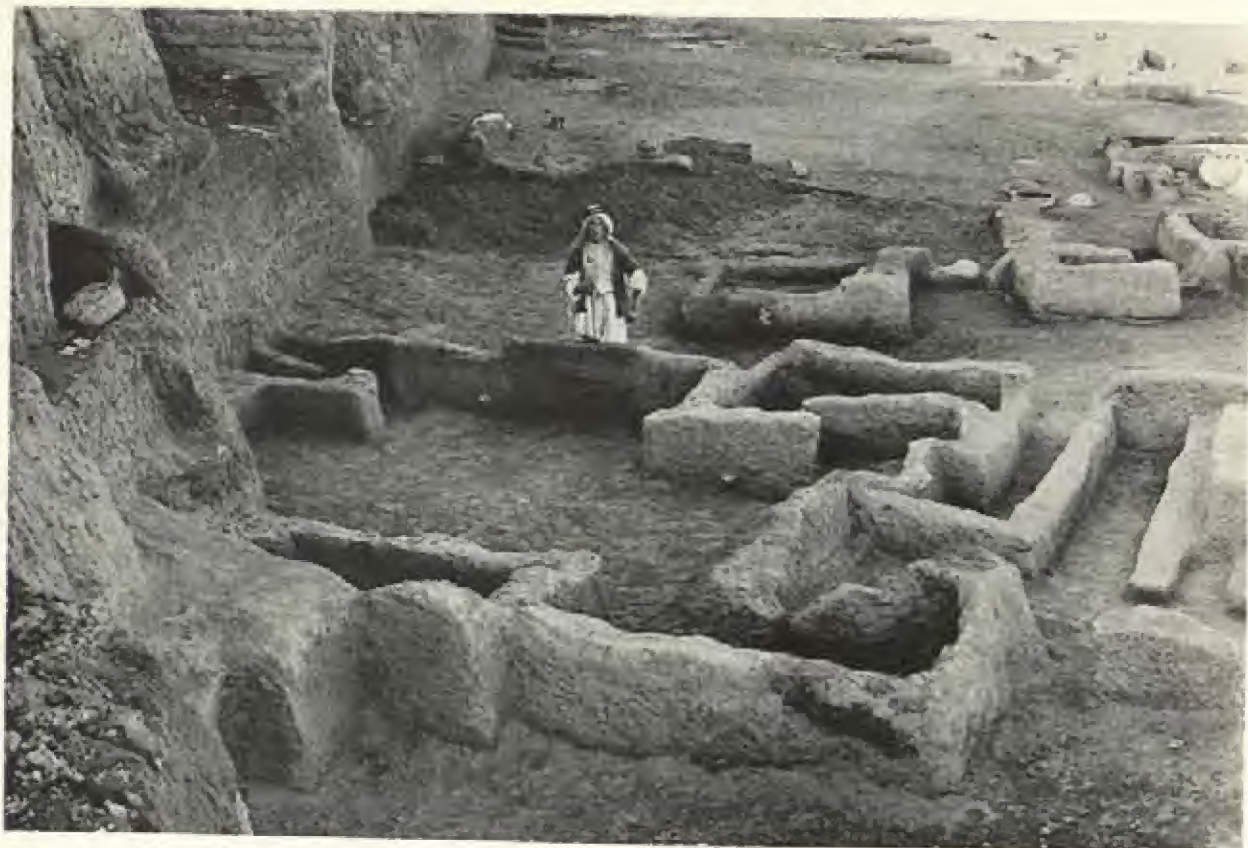
b. General view of the acropolis of Stratum XIII, with the stone foundations of Stratum XIV under the Main Court. Looking north.



a. House of Stratum XV. Looking north.



b. House of Stratum XV. Looking northeast.



a. House in Stratum XVI, looking northwest. Traces of a fresco may be seen as a black streak on the wall in front of the workman.



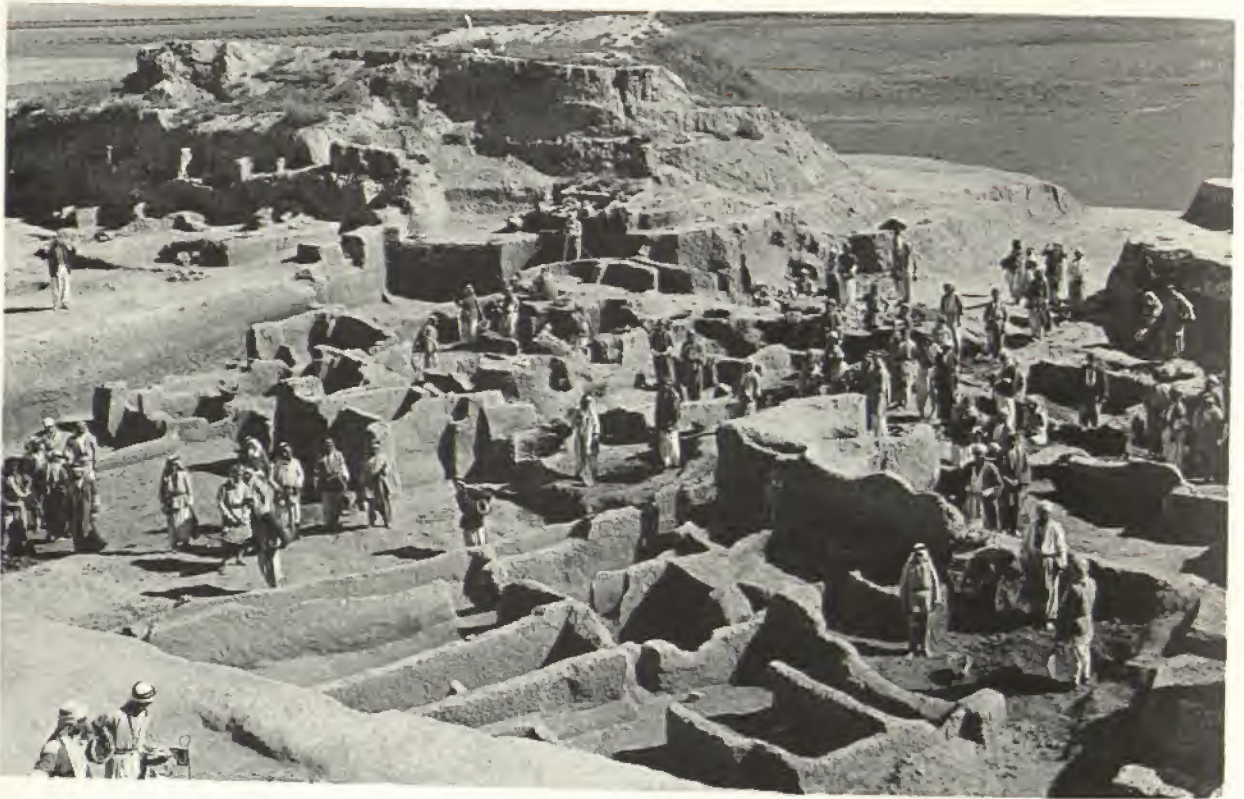
b. House and kiln, Stratum XVI. Looking east.



a. Kiln and ovens in Square 5-S, Stratum XVI. Looking northwest.



b. Stratum XVII Northern Tholos. Looking north.



a. Sounding area at the level of Stratum XVIII. Part of the Stratum XVII Northern Tholos in the center background. Looking north.



b. Temple of Stratum XVIII, looking east.



a. Large private house in Stratum XIX, looking south. The man in the center background stands over the Stratum XX Tholos.



b. Temple of Stratum XIX, looking east.



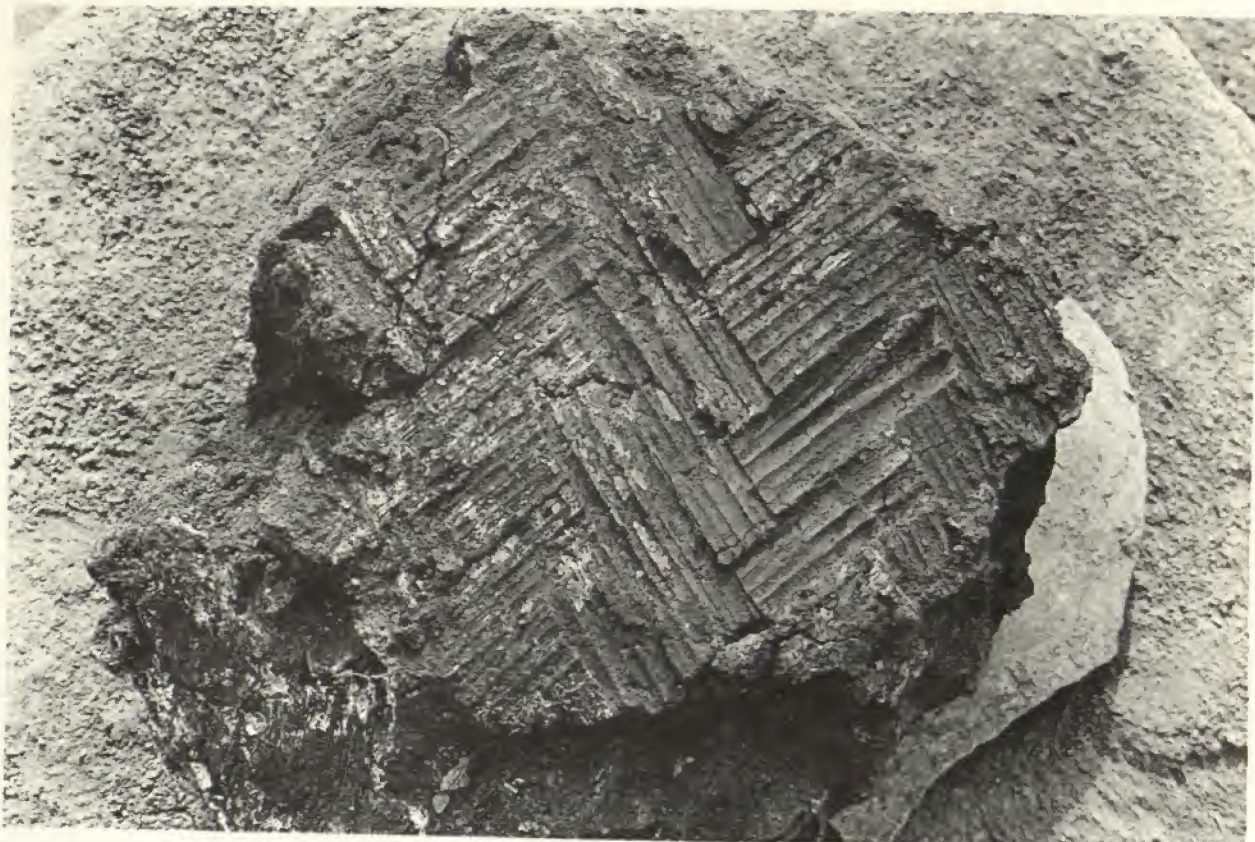
Tholos of Stratum XX, looking northeast.



a. Tombs 111, 109, 114 and 110 after excavation.



b. Tomb 180, with part of the mud-brick cover removed.



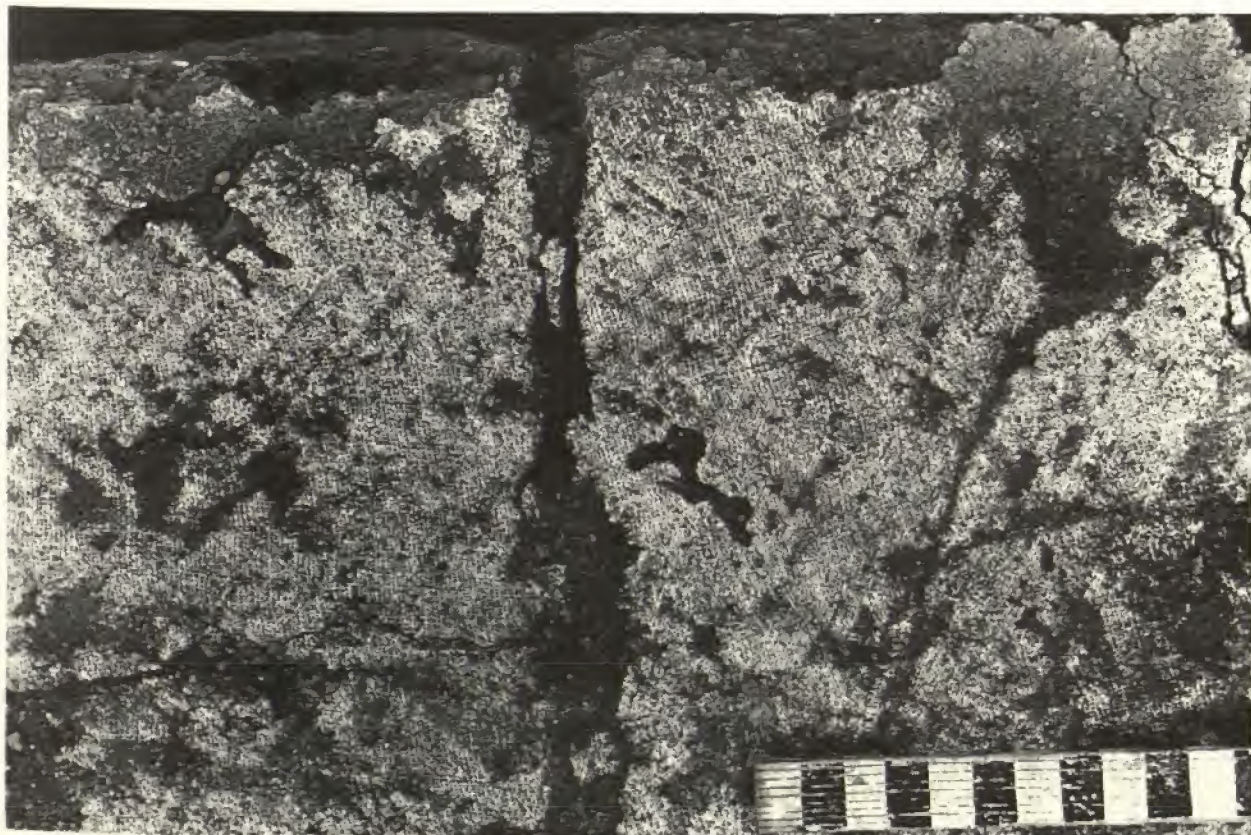
a. Tomb 34. Impression of reed matting.



b. Stone slab roof of Tomb 124.



a. Tomb 114, showing traces of the white ash of the wood cover.



b. Remains of cloth on bricks of Tomb 34.



a. Tomb 2 (cist).



b. Tomb 213 (cist) and its occupant.



a. The three skeletons in Tomb 111.



b. Skeletons in Tomb 25.



a. Skeleton in Tomb 31.



b. Skeleton in Tomb 24.



a. Tomb 18.



b. Stone "hut symbols" from Tomb 31.



c. Fragment of a marble jar from Tomb 45.



a. Serpentine bowl from Tomb 31.



b. Spouted jar of obsidian from Tomb 102.



c. Spouted bowl of obsidian from Tomb 102.



d. Oölitic pot from Tomb 109.



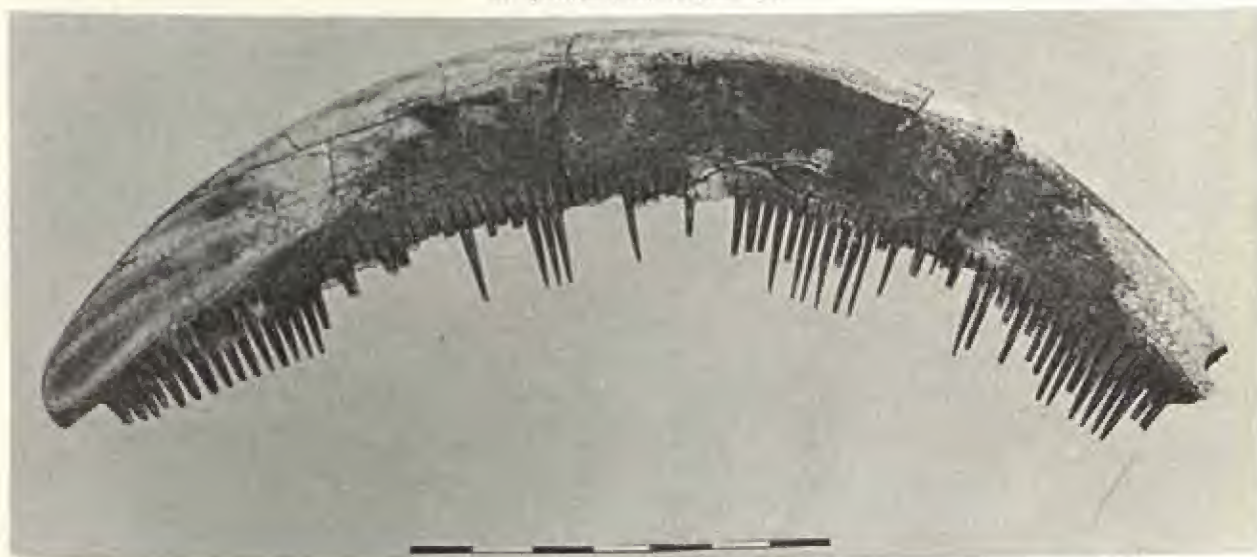
e. Serpentine beaker from Tomb 110.



f. Marble jar from Tomb 109.



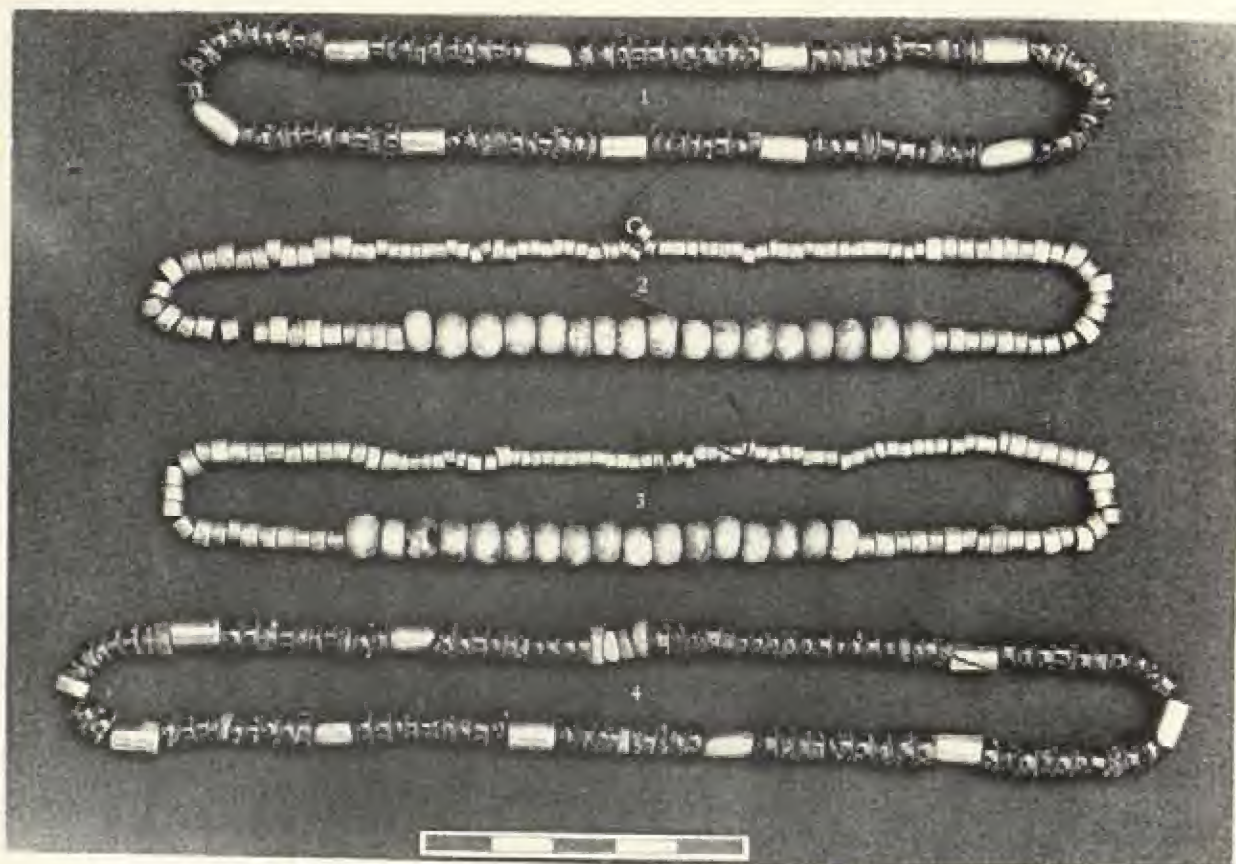
a. Combs from Tomb 31.



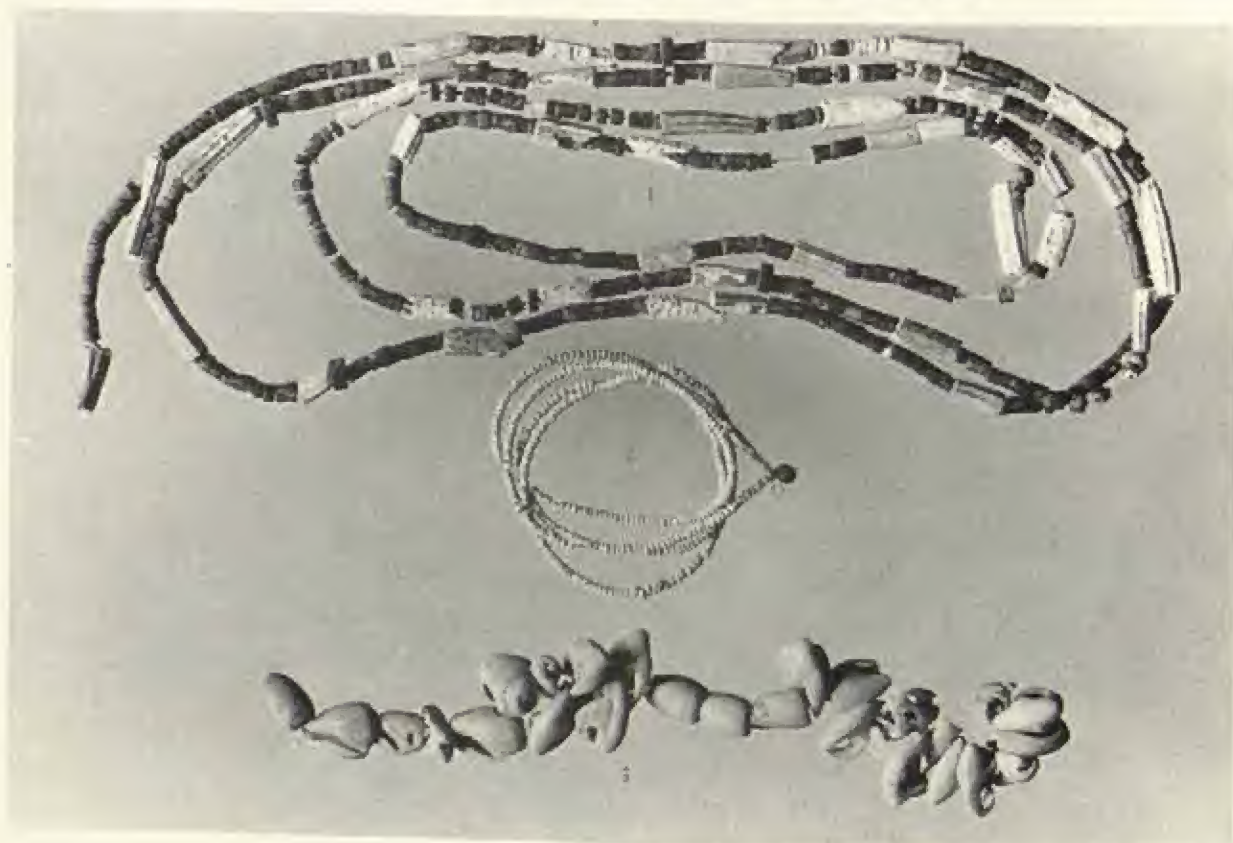
b. Ivory comb from Tomb 34.



c. Comb and inlaid hairpin from Tomb 24.



a. Beads (mostly gold and electrum) from Tombs 109 and 110.



b. Beads from Tomb 209.



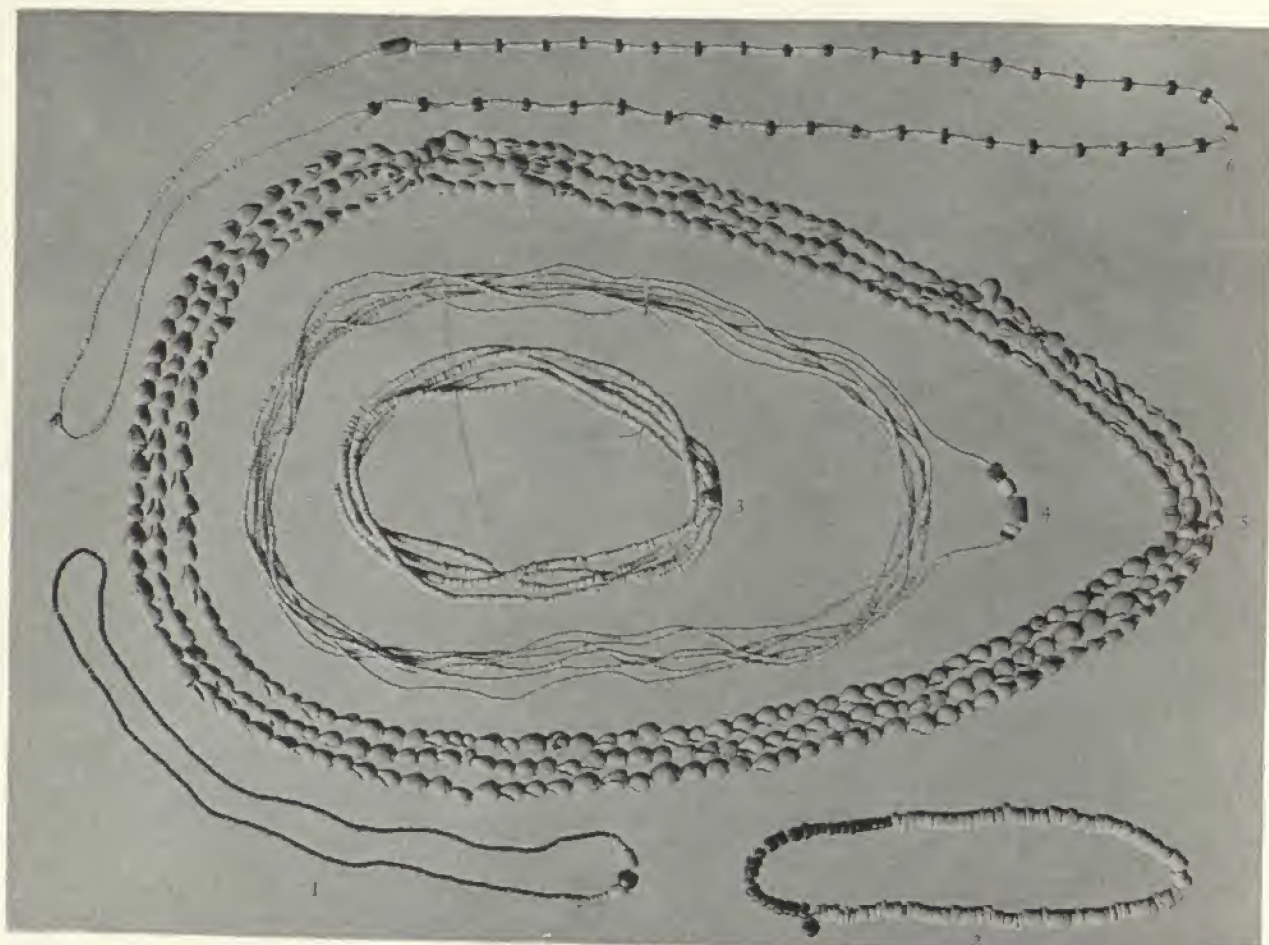
a. Beads from Tomb 31.



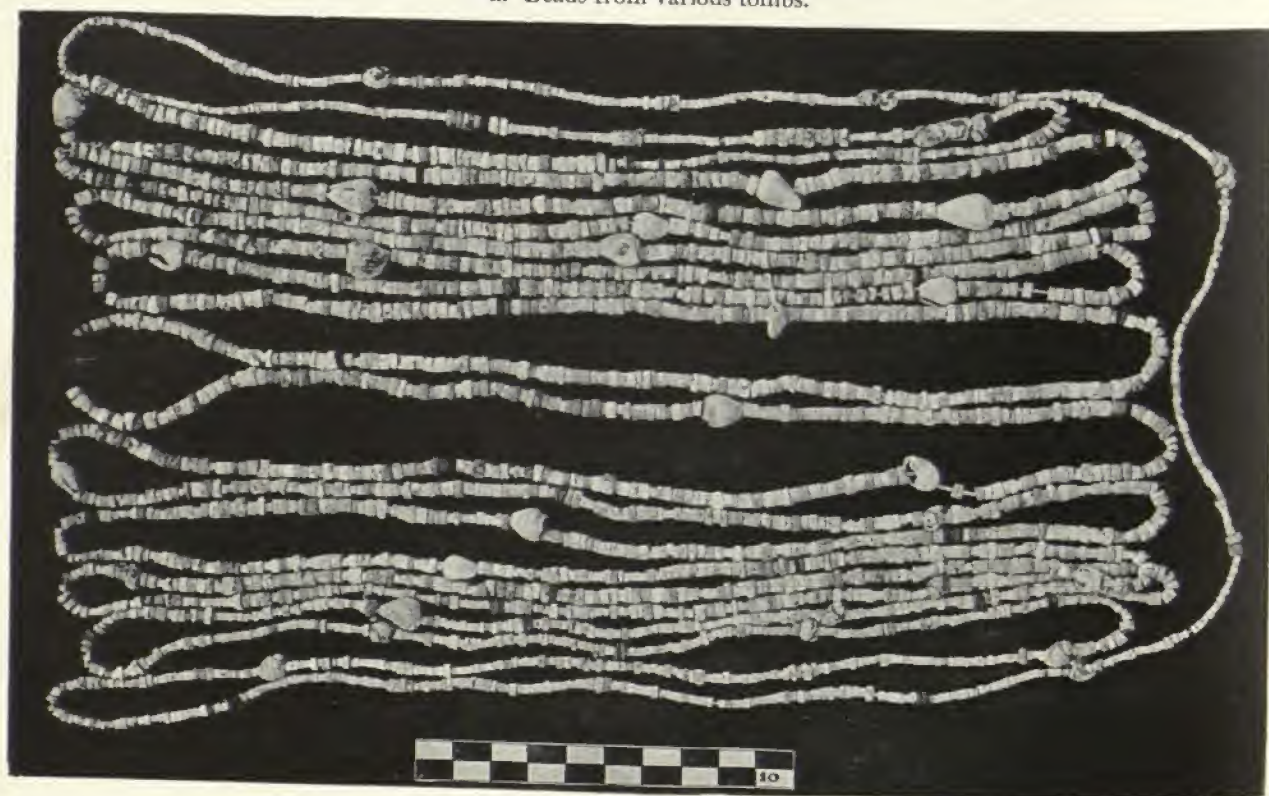
b. Beads and pendants from Tomb 111.



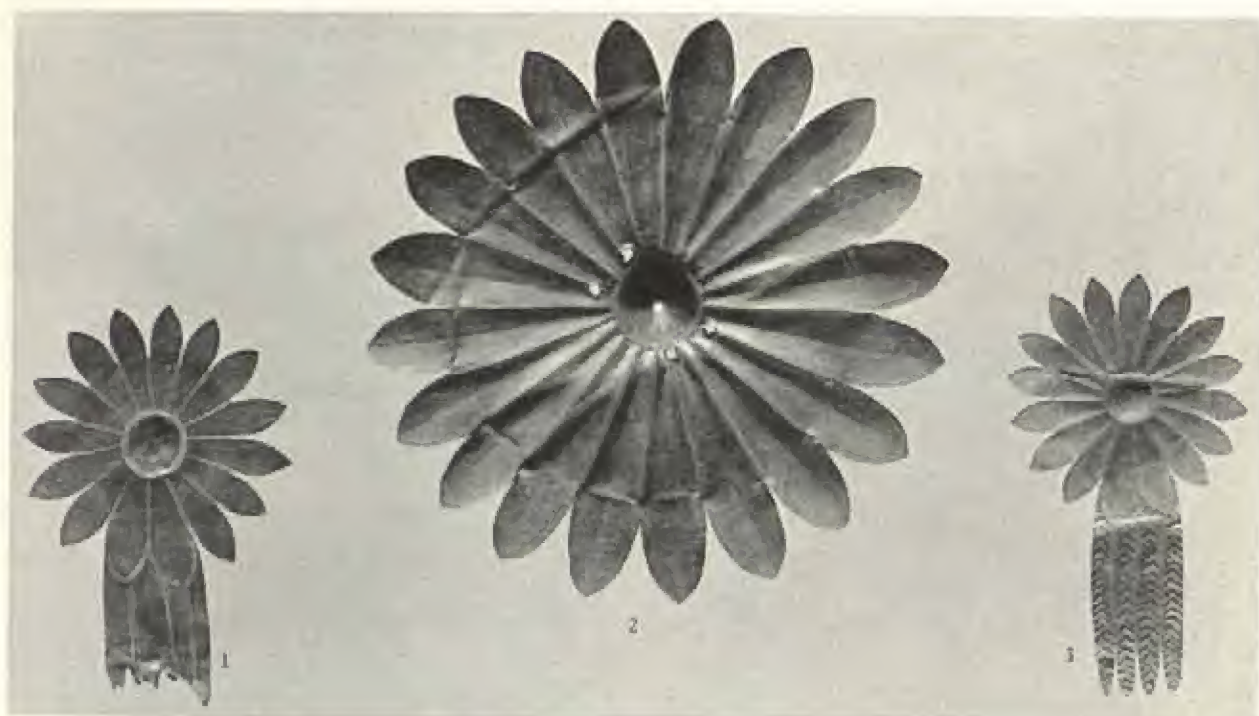
c. Lapis beads and pendant from Tomb C.



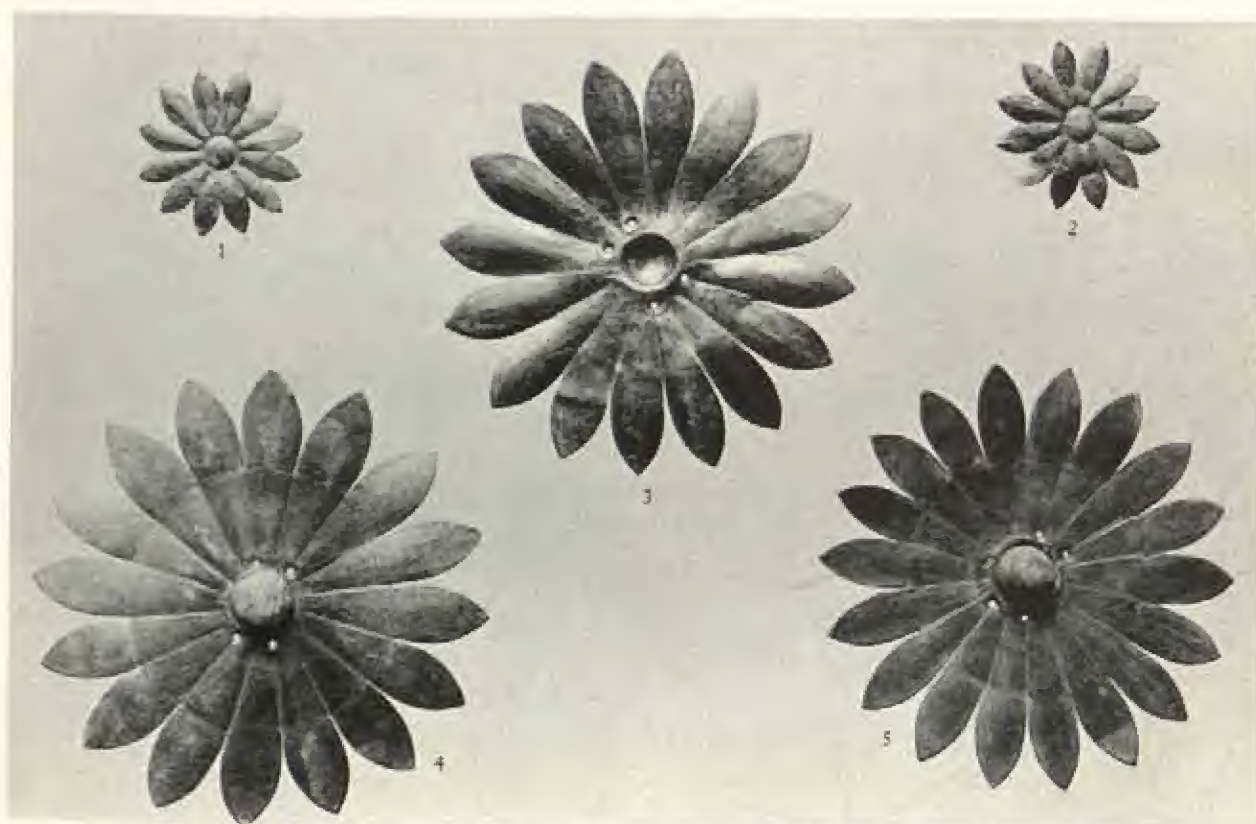
a. Beads from various tombs.



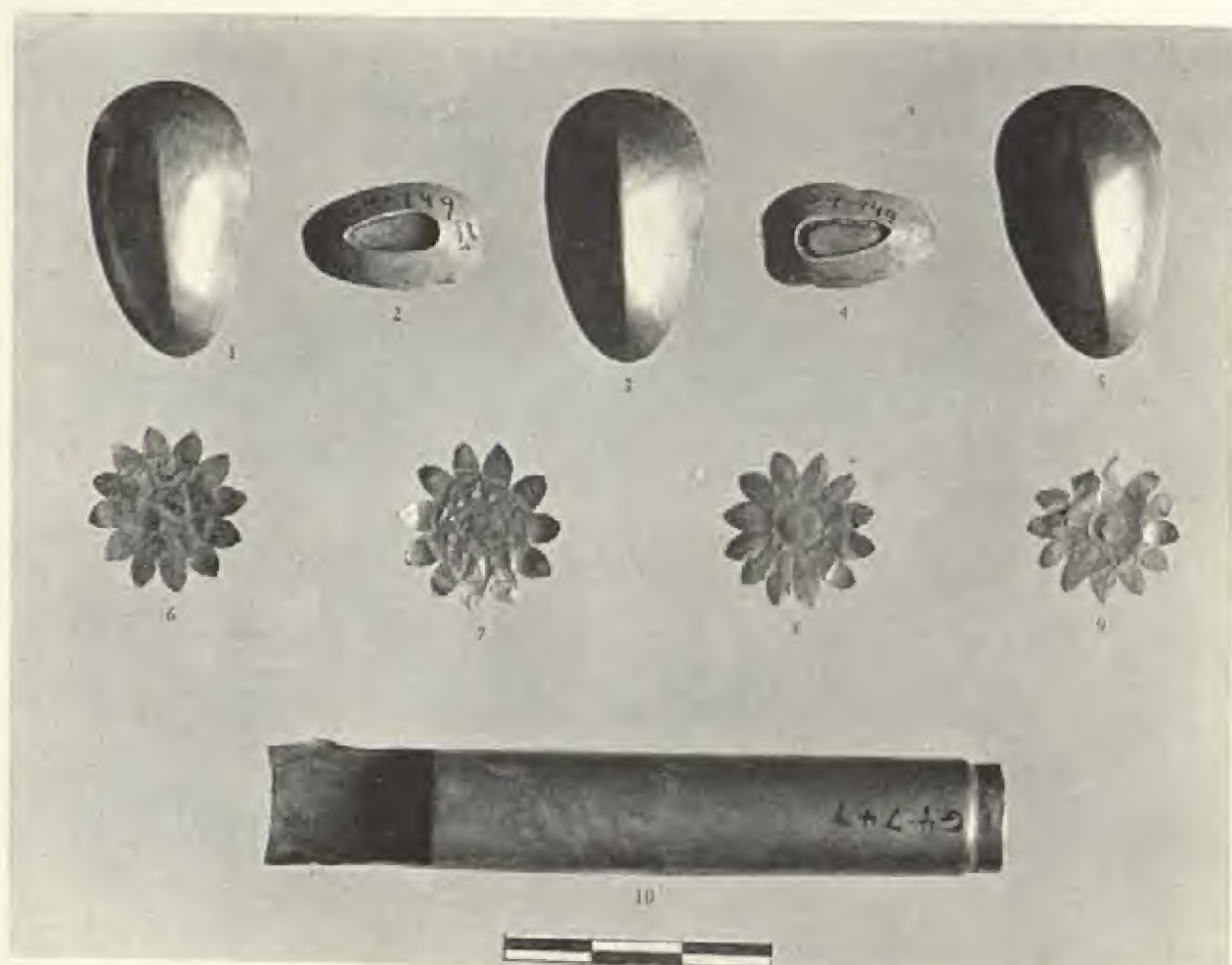
b. Beads and seal from Tomb G36-60.



a. Gold rosettes from Tombs 109 and 110.



b. Gold rosettes from Tombs 109, 110 and 114.



a. Gold studs, rosettes and tube from Tombs 109 and 110.



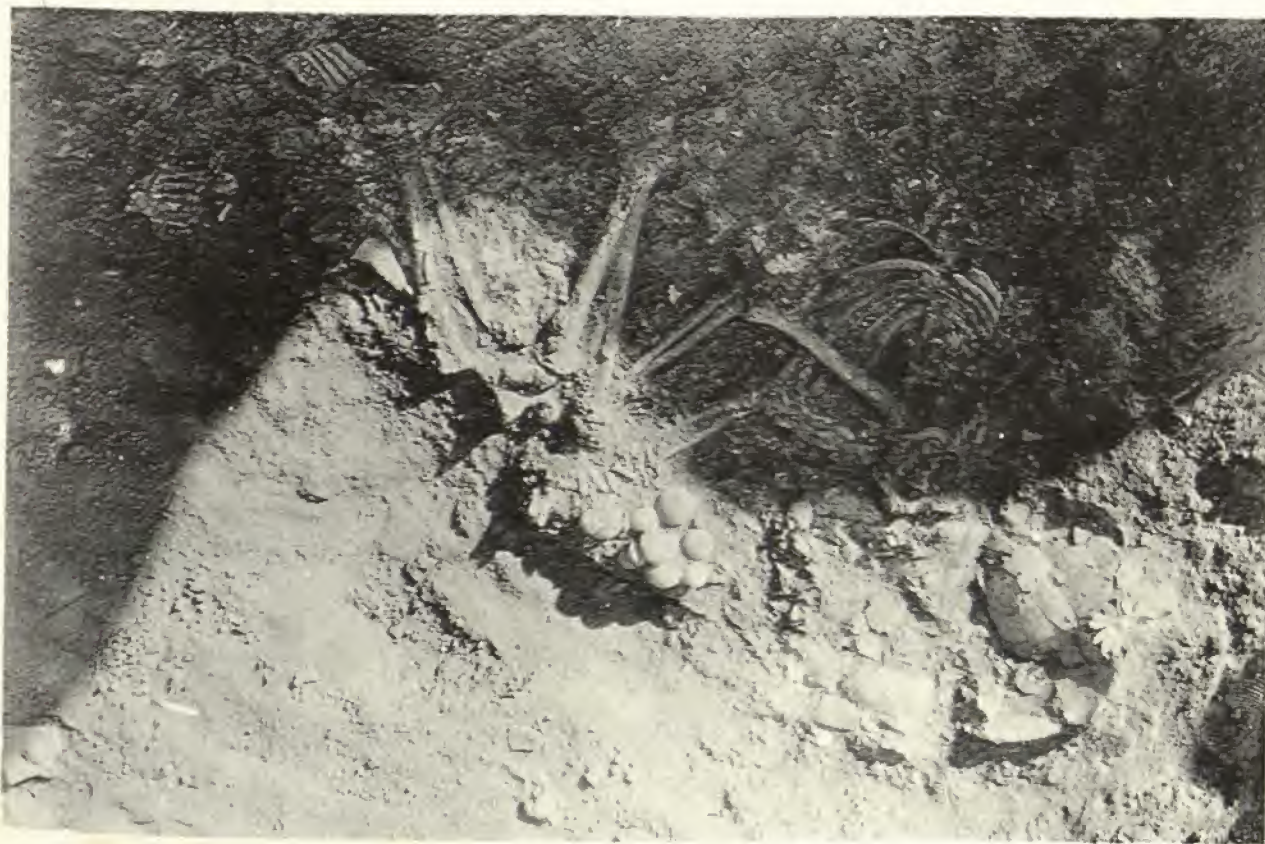
b. Electrum wolf's head from Tomb 114.



c. Ivory plaque from Tomb 31.



a. Locus 7-15, a Stratum XI grave. The white substance is the remains of matting.



b. Locus 181, a grave excavated from the central chamber of the Stratum XI Temple into Stratum XI-A.



a. Locus 7-27, a grave from Stratum XV.



b. Locus 7-47, an unusual extended burial from Stratum XVI.



a. Locus 7-59, a grave from Stratum XVII.



b. Locus 7-58, a grave from Stratum XVII.



a. Locus 7-66, a burial of an adult and infant from Stratum XVII.



b. Detail of objects at foot of grave, Locus 7-68, from Stratum XVII.



a. Locus 7-70, a grave from Stratum XVII.



b. Locus G36-159, a grave in Area A, Level F.



a. Locus 183, a lidded urn burial from Stratum XI-A.



b. Locus 175, a covered urn burial from Stratum XI.



a. Locus 140, an urn burial of an infant from Stratum XI.



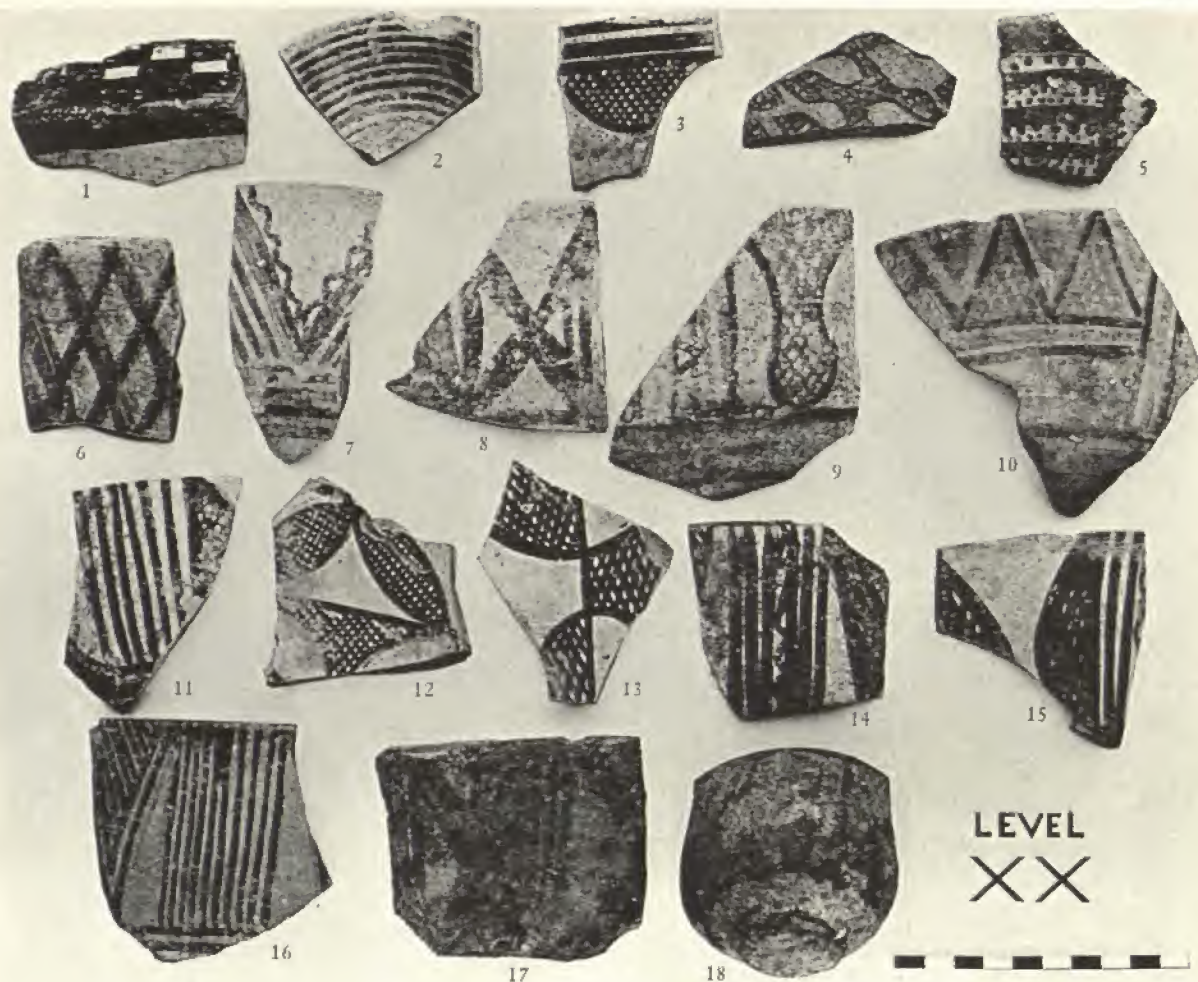
b. Locus 7-30, a grave with mud-brick side-wall from Stratum XI-A.



a. Selected sherds from Level E of Area A.



b. Selected sherds from Level F of Area A.



a. Selected sherds from Stratum XX.



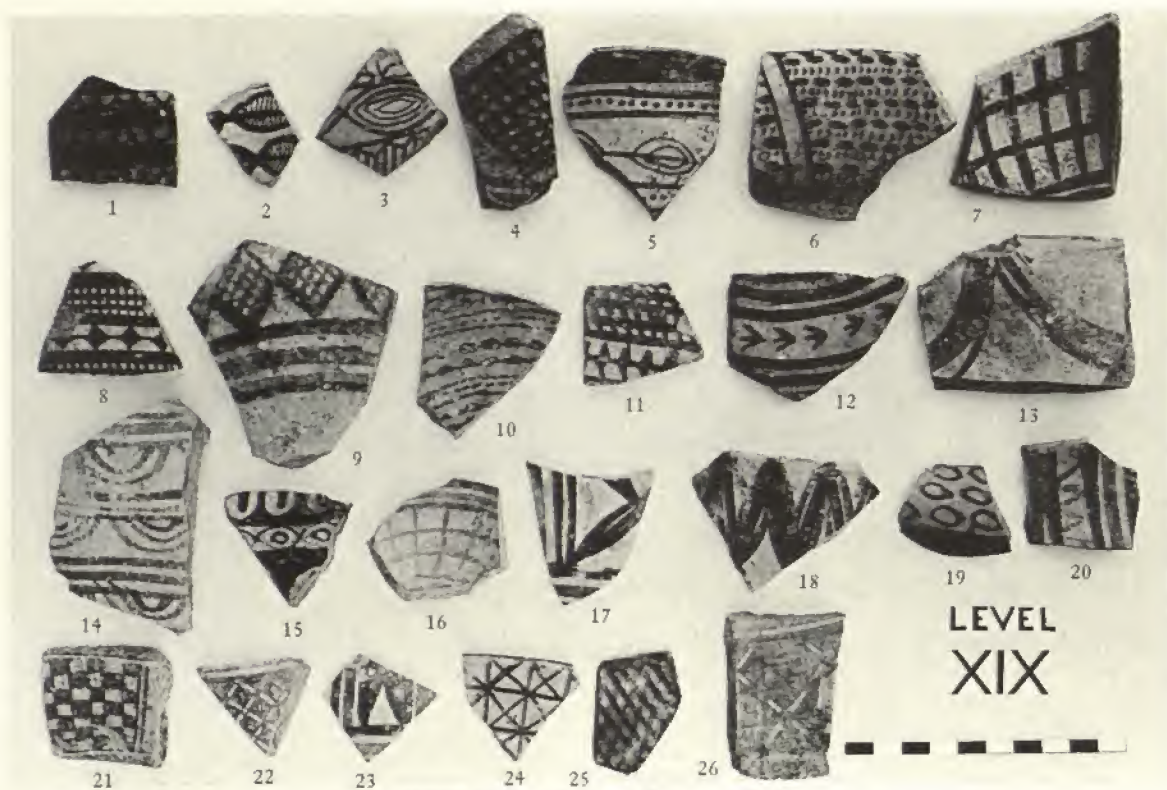
b. Selected sherds from Stratum XX.



a. Selected sherds from Stratum XIX.



b. Selected sherds from Stratum XIX.



a. Selected sherds from Stratum XIX.



b. Selected sherds from Stratum XVIII.



a. Selected sherds from Stratum XVIII.



b. Selected sherds from Stratum XVIII.



a. Pottery vessels from Strata XVIII and XIX.



b. Jar from Locus 7-59, a grave in Stratum XVIII.



c. Jar from Locus 7-58, a grave in Stratum XVIII.



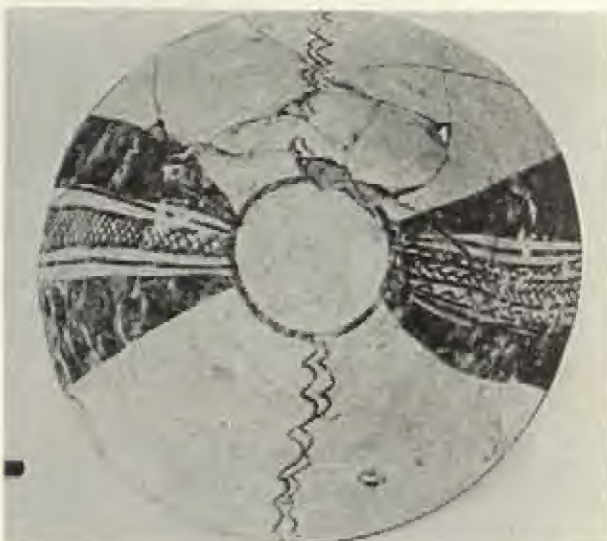
a. Bowl from Stratum XVIII.



b. Lenticular jar from Stratum XVIII.



c. Painted vessels from graves in Stratum XVIII.



d. Bowl from Locus 7-70, a grave in Stratum XVIII.



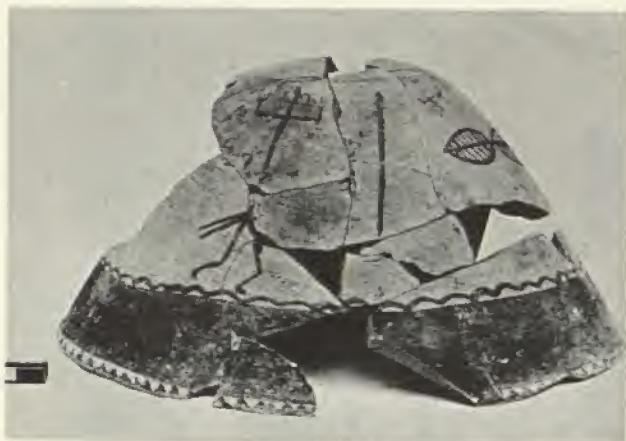
e. Pottery scoops from Stratum XVIII.



a. Selected sherds from Stratum XVII.



b. Selected sherds from Stratum XVII.



a. Bowl with painted human figure from Stratum XVII.



b. Decoration detail of bowl shown in a.



c. Painted sherd from Stratum XVII.



d. Lenticular jar from Stratum XVII.



e. Spouted jar from Stratum XVII.



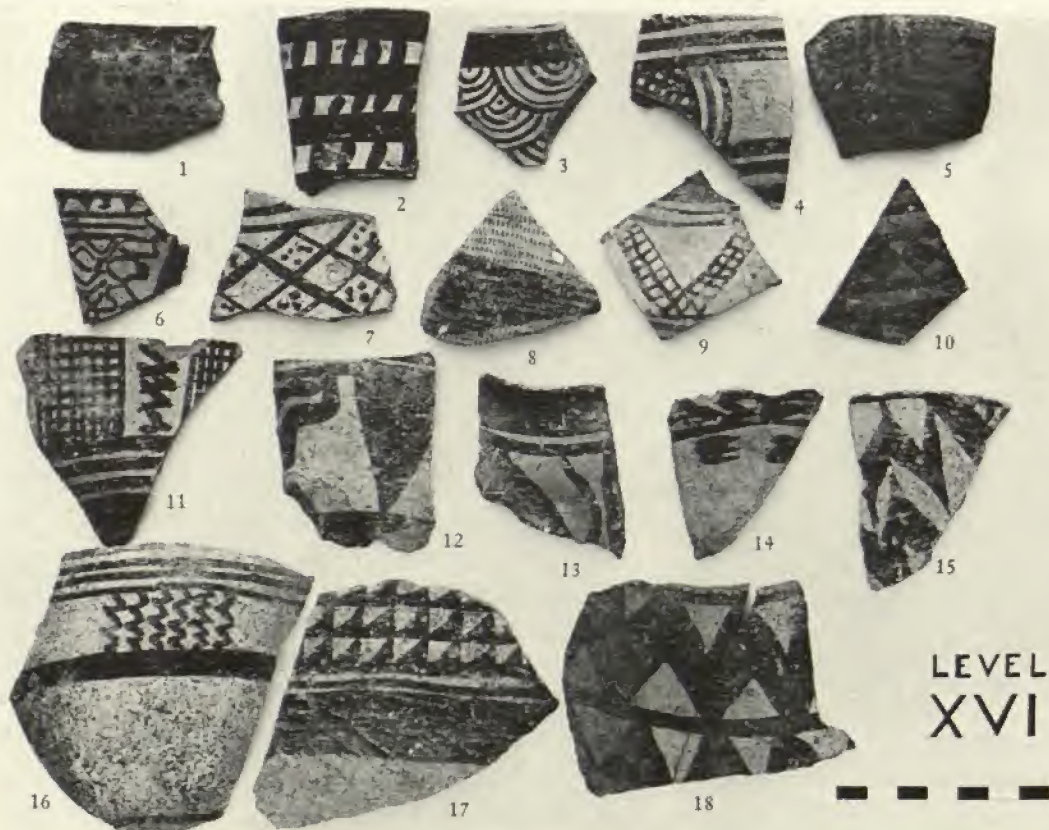
a. Selected sherds from Stratum XVI.



b. Selected sherds from Stratum XVI.



a. Selected sherds from Stratum XVI.



b. Selected sherds from Stratum XVI.



a. Urn of Locus G36-29, a Stratum XII grave.



b. Detail of painted decoration.



c. Incised jar, Stratum XIII.



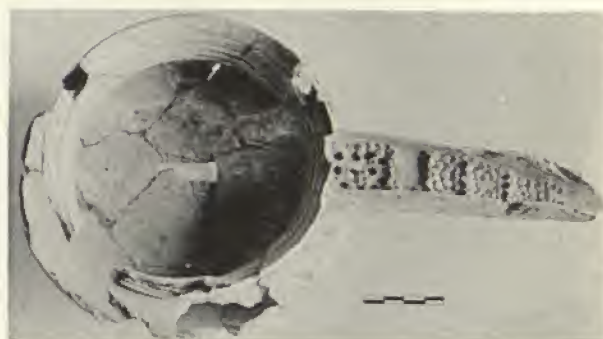
d. Incense burner from the Eastern Shrine of Stratum XIII.



a. Pottery fragments from Stratum XI.



b. Decorated sherds from Stratum XI.



c. Spouted bowl from Stratum XI-A.



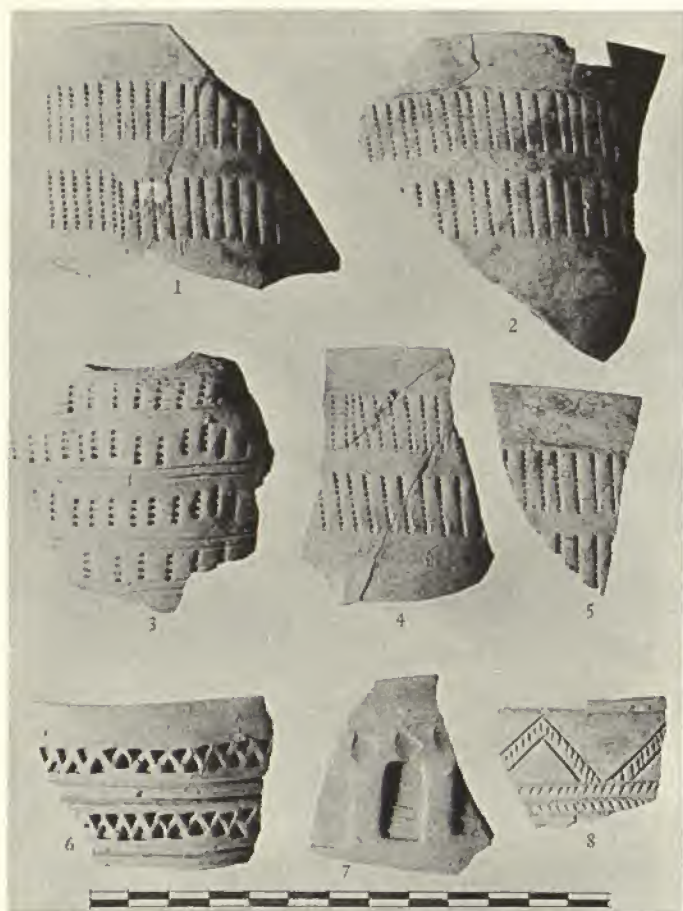
d. Bowl with impressed decoration from Stratum XI.



e. Urn of Locus G36-131, a Stratum XII grave.



f. Bowl from Stratum XII.



a. Decorated sherds from Strata IX-XI.



b. *Kernos* fragment from Stratum IX.



c. Bowl with modeled figures from Stratum IX.



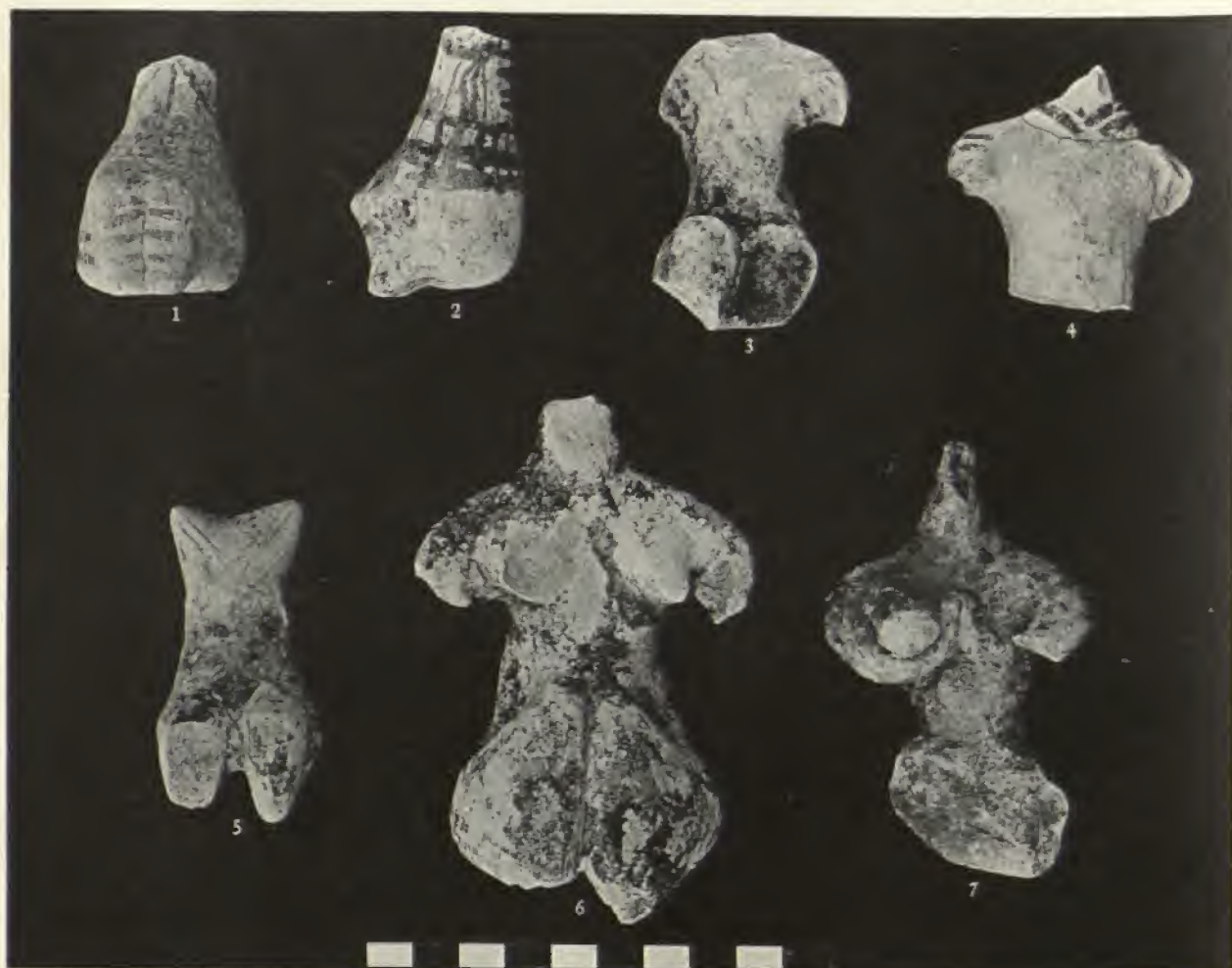
a. Terra cotta female figurine from the Northeast Base.



b. Terra cotta female figurine from Stratum XVII.



c. Terra cotta female figurine from Stratum XVII.



d. Terra cotta female figurines from Strata XVIII and XIX.



a. Terra cotta animal figurines from Strata XI, XVI and XVII.



b. Terra cotta objects from Locus 7-37, a child's grave in Stratum XVII.



c. Terra cotta animal figurines from Strata X, X-A and XI.



a. Terra cotta animal figurine with shell decoration from Stratum XI.



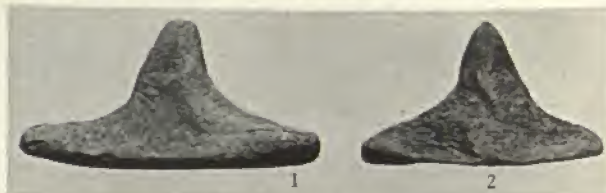
b. Anthropomorphic gaming pieces of terra cotta from Stratum XIII.



c. Terra cotta leopard figurine from Stratum XII.



d. Cult object (?) of sun-baked clay from Stratum IX.



e. Terra cotta buffers from Stratum XVII.



f. Cones and nail-shaped mullers of terra cotta and stone from Strata XVIII and XIX.



g. Nail-shaped mullers of terra cotta from Strata XVI and XVII.



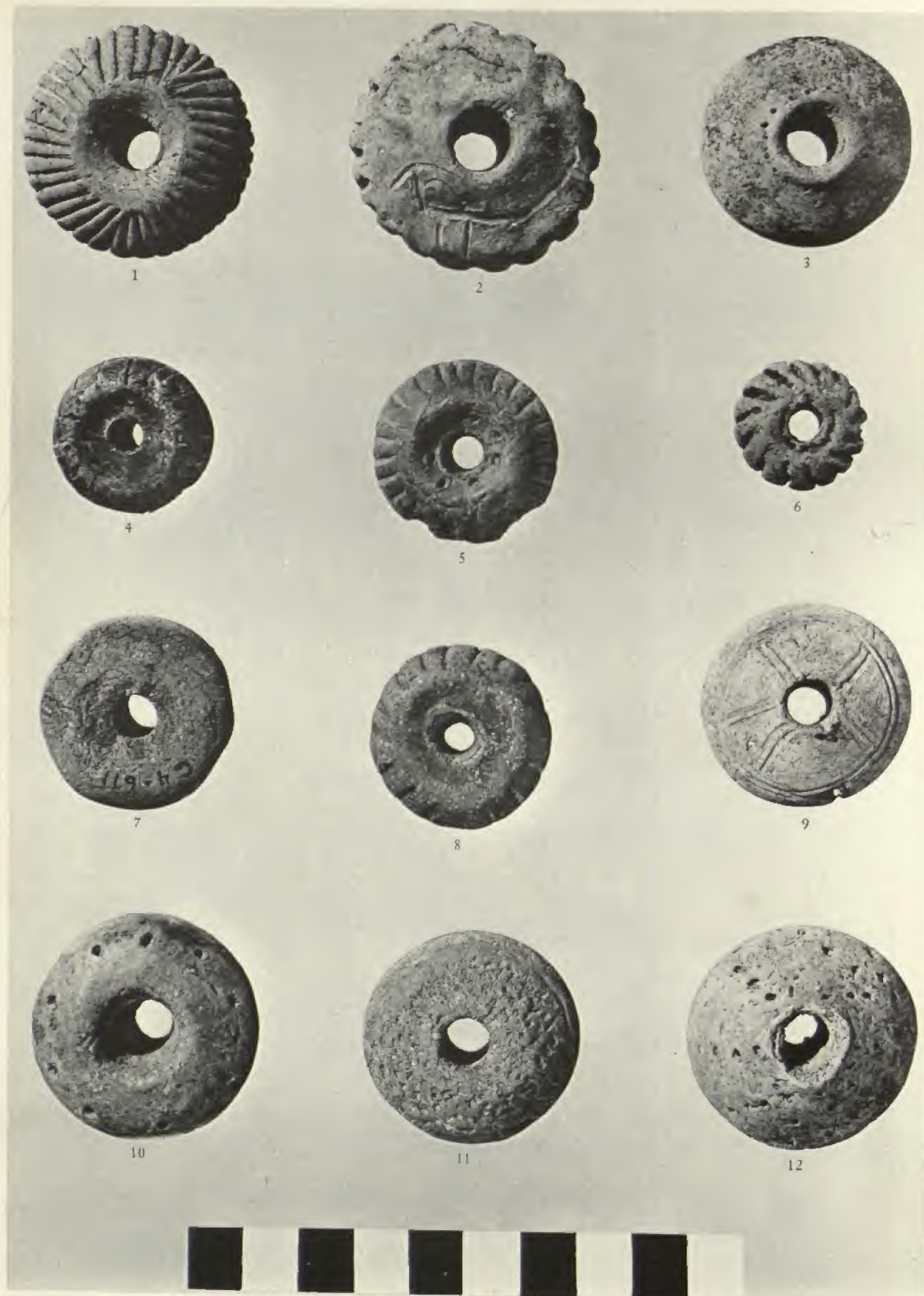
a. Terra cotta gaming pieces found in Room K of the Round House (Stratum XI-A).



b. Anthropomorphic gaming pieces of terra cotta from Strata XV and XVI.



c. Selected terra cotta gaming pieces from Locus 7-58, a grave in Stratum XVIII.



Selected terra cotta spindle whorls from Stratum XII.



a. "Hut symbols" of terra cotta from Strata XI, XI-A and XII.



b. Selected clay sling pellets (?) from the Stratum XIII Well.



a. Cache of clay sling pellets in Square 5-K of Stratum XI.



b. Cache of ovoid sling pellets and a horned cult object (?) in Square 6-K of Stratum XI.



a. Selected seals.



b. Seal impression fragment from Stratum XII.



c. Unstratified lapis lazuli seal and its impression.



a. Seal impression on bulla. Stratum X.



b. Seal impression from Area A.



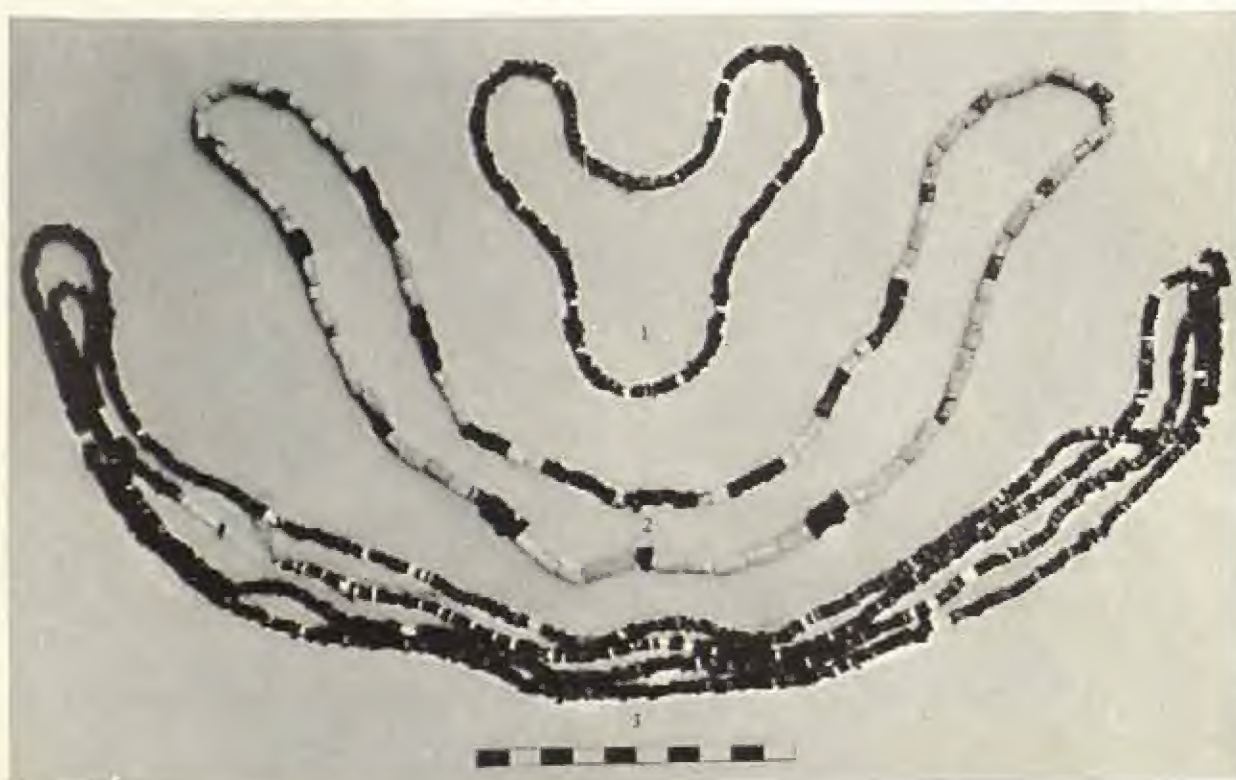
c. Seal impression from Stratum XI-A.



d. Seal impression from Stratum XI-A.



a. Beads from Stratum XVI and from graves in Stratum XVIII.



b. Beads from graves in Stratum XVIII.



a. String of beads from a hoard in Stratum XII.



b. Selected pendants.



a. Selected engraved beads, pendants, ornaments and studs.



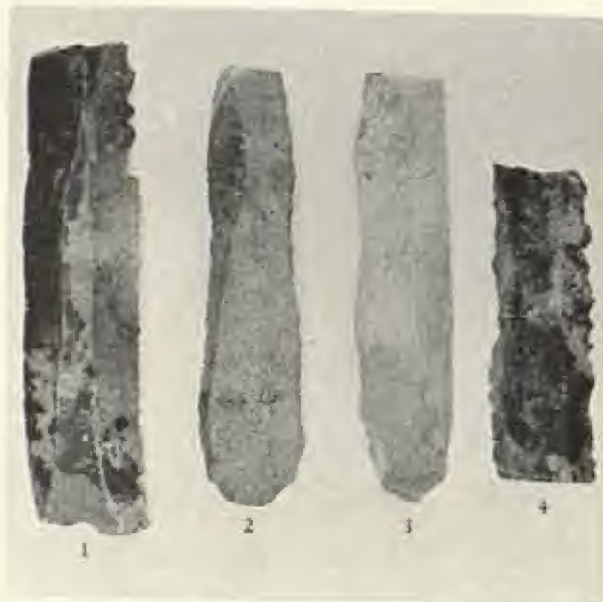
b. Selected pendants.



c. Selected pendants and ornaments.



a. Selected implements and celts from Area A.



b. Selected flint and chert implements from Stratum XVI.



c. Selected obsidian implements from Stratum XVI.



a. Basalt hammerstone from Stratum IX.



b. Flint core from Stratum IX.



c. Black marble hammer from Stratum XI-A.



d. Gray slate mace-head from a grave (Locus 142) in Stratum XI-A.



e. White marble mace-head, Stratum XIII.



f. Bottom view of d., above.



a. Selected celts, Strata XII and XI-A.



b. Celts from Strata XVI, XVIII and XIX.



c. Selected celts, Stratum XVII.



d. Kohl vessels of stone. Strata XI-A and XII.



e. Human figurines (?) of stone.



a. Stone gaming pieces, Strata XI and XI-A.



b. Grinding stones.



a. Selected palettes and mace-heads.



b. Stone weights.



c. Object of black steatite from the Stratum XII Well.



d. Stone mortars, Strata XI and XI-A.



a. Selected copper implements.



b. Bone implements from Strata XVI and XVII.



a. Bone implements from the Stratum XIII Well.



c. Bone implement with clay handle, and bone playing pipe. Stratum XII.



b. Bone playing pipes from Strata XVI and XVII.



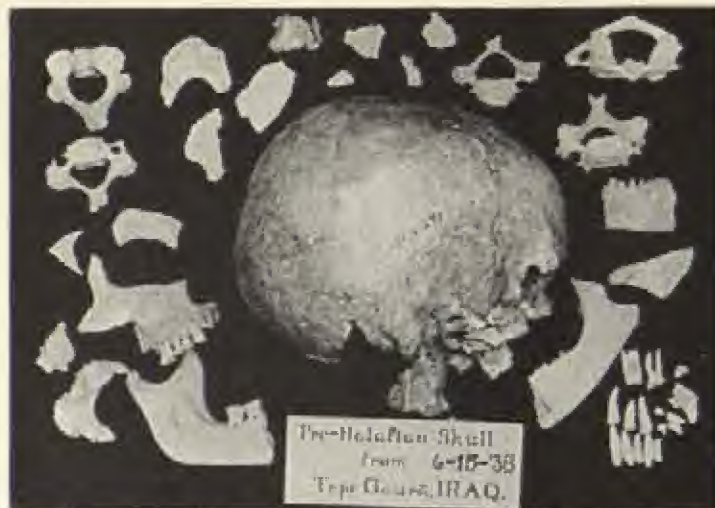
d. Bone playing pipes, Strata XII and XV.



a. Burial A in the Area A Well.



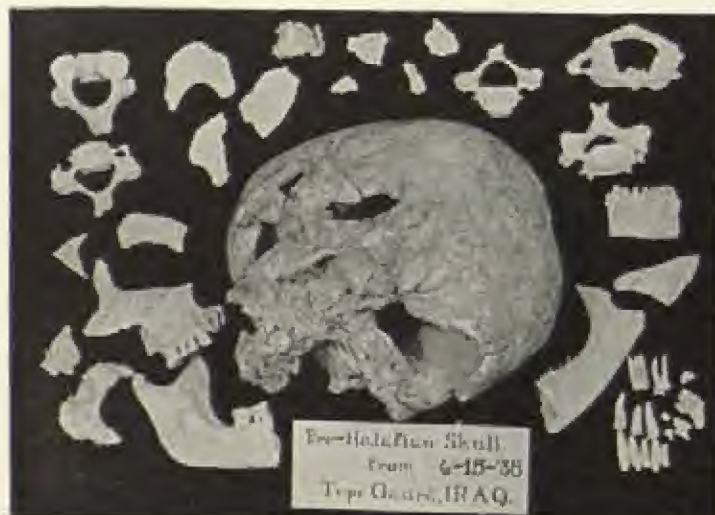
b. The upper level of Burial B in the Area A Well. The skull described in Chapter XI lies in the center of the Well.



a. Skull from the Area A Well, partly cleaned.



b. Skull from the Area A Well showing skull fragments, other bones which came with the skull, and the earth which formed the matrix in which the facial region was embedded and which was found inside the skull. Cleaning completed.



c. Skull from the Area A Well, partly cleaned.



a. Skull from the Area A Well. Norma frontalis of the restored skull.



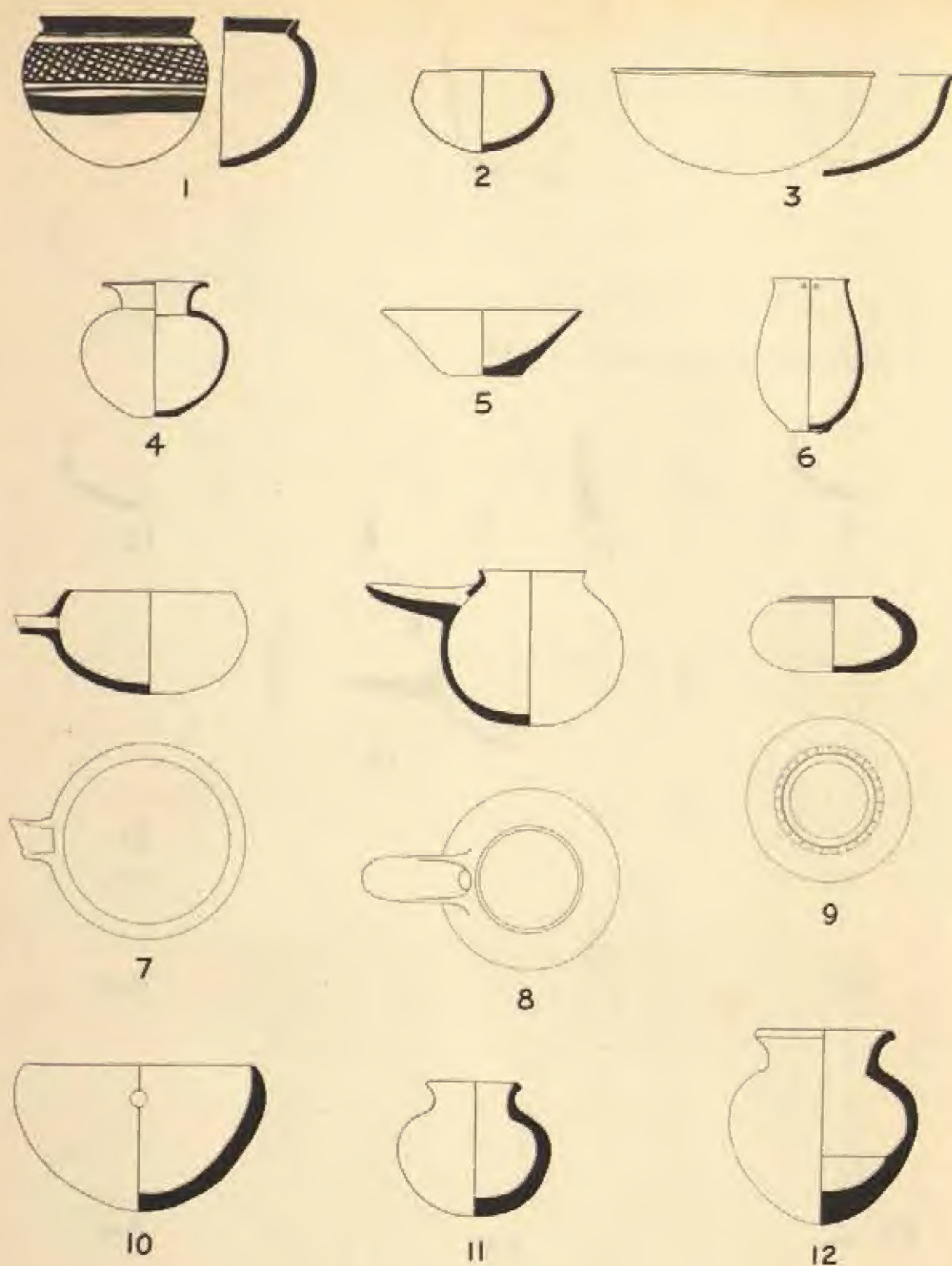
b. Skull from the Area A Well. Norma latera sinistra of the restored skull.



c. Skull from the Area A Well. Norma lateralis recta of the restored skull.

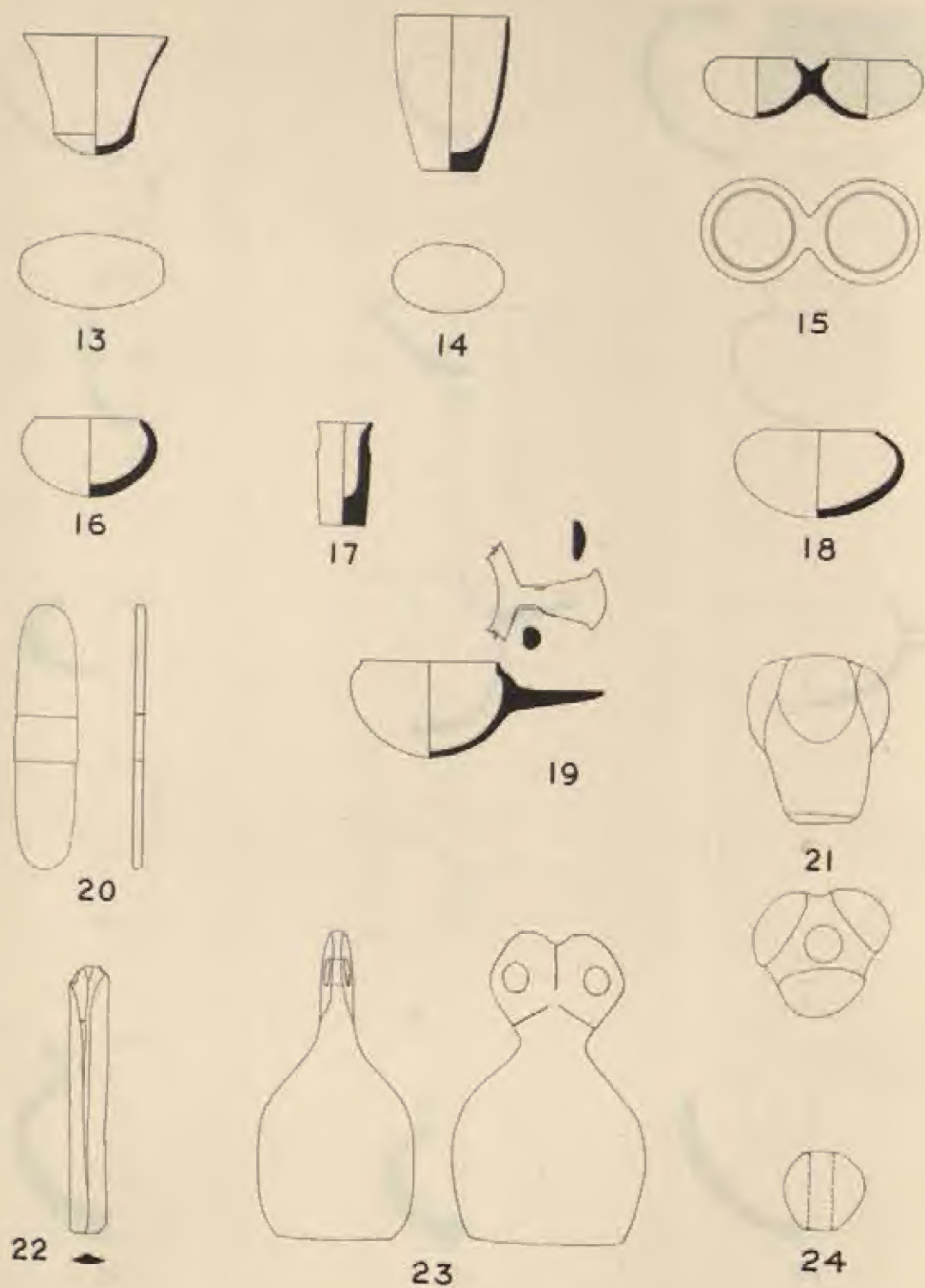


d. Skull from the Area A Well. Norma verticalis of the restored skull.



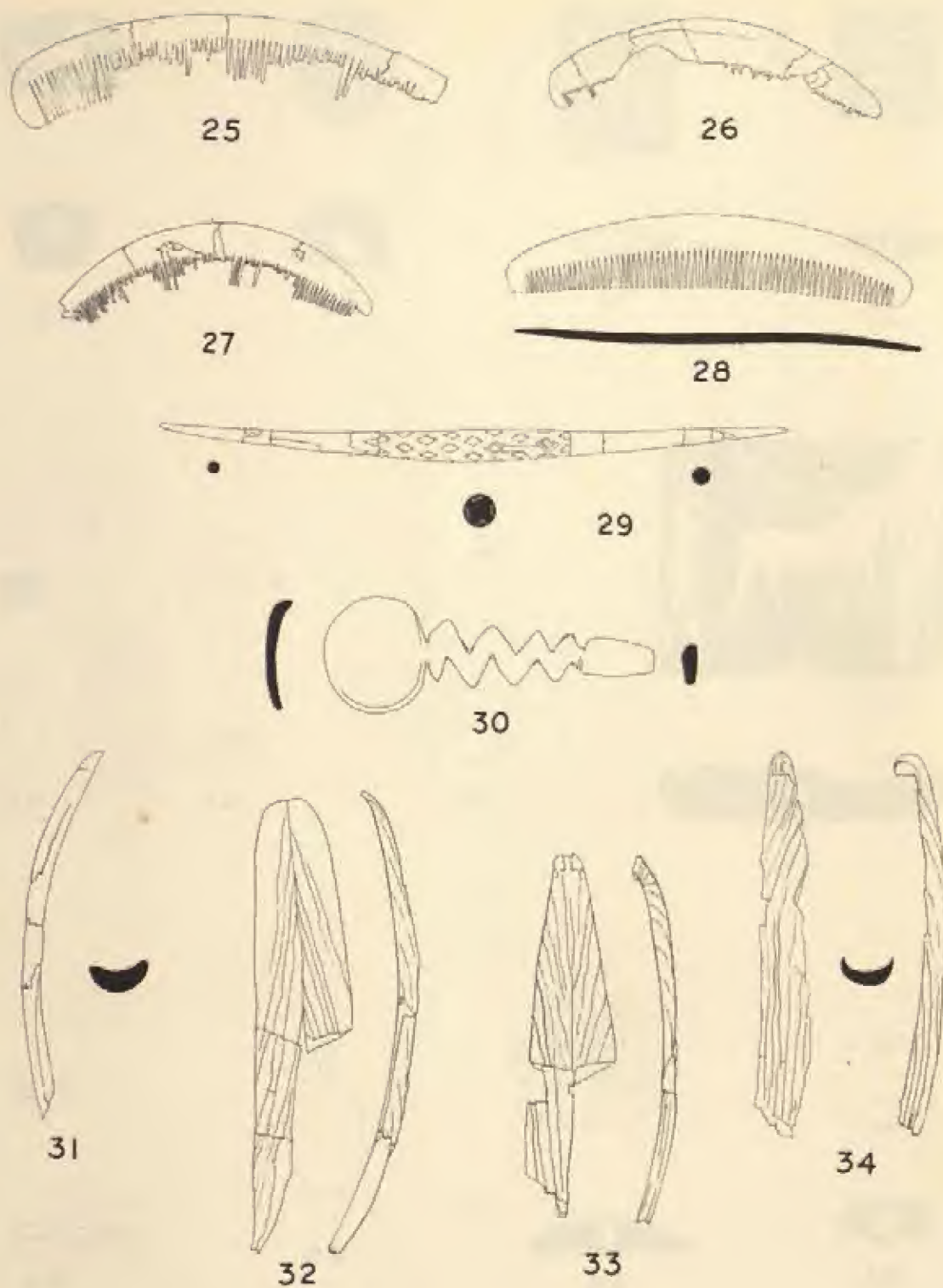
Pottery and stone vessels from the tombs.

(Scale Figs. 1-4—1/5; Figs. 5-6—1/8; Figs. 7-10—1/4; Figs. 11-12—1/2)



Stone objects from the tombs.

(Scale Figs. 13, 14, 18, and 24—1/4; Fig. 15—1/10; Figs. 16, 17, 19–23—1/2)



Bone and ivory objects from the tombs.

(Scale Figs. 25, 28-34—1/2; Figs. 26-27—1/4)



35



36



37



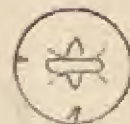
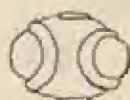
38



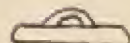
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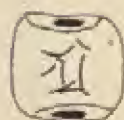
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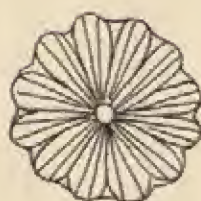
41



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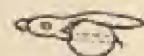
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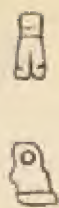


46



Seals, beads and pendants from the tombs.

(Scale 1/1)



47



48



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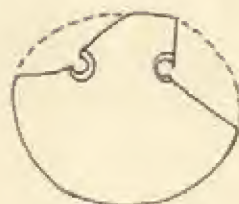
50



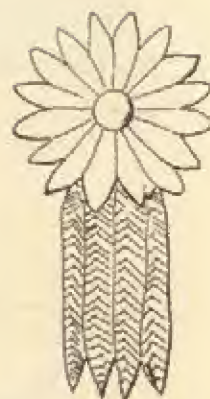
51



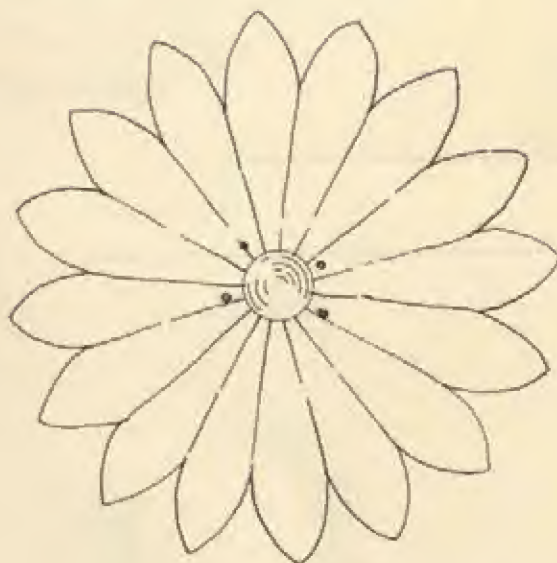
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52



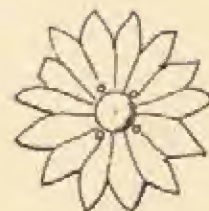
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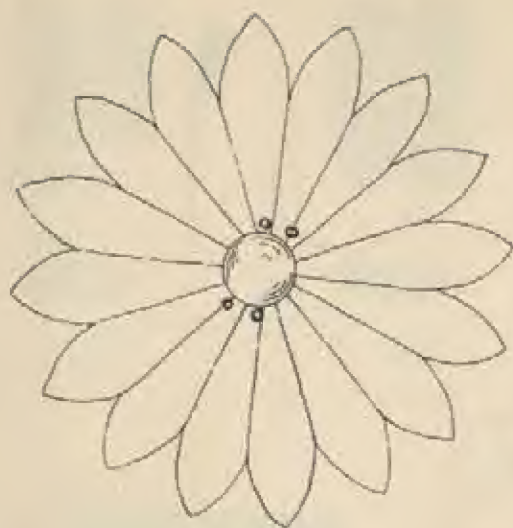
56



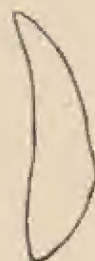
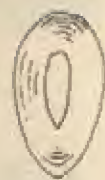
57

Pendants and ornaments from the tombs.

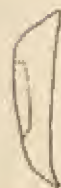
(Scale 1/1)



58



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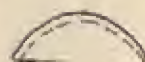
60



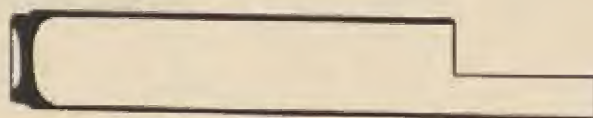
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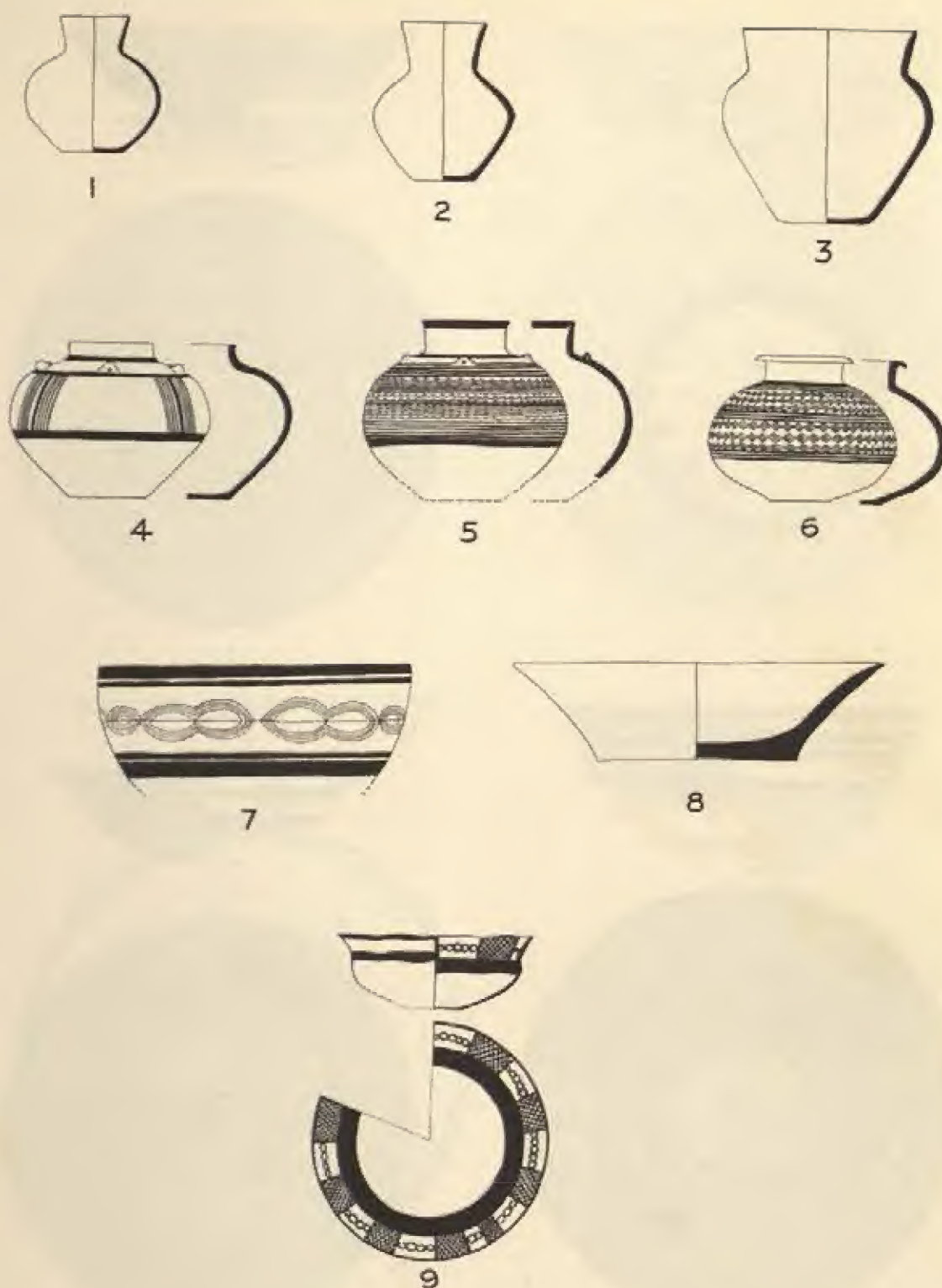
64



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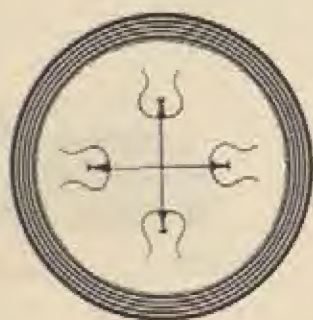
Gold and electrum objects from the tombs.

(Scale 1/1)

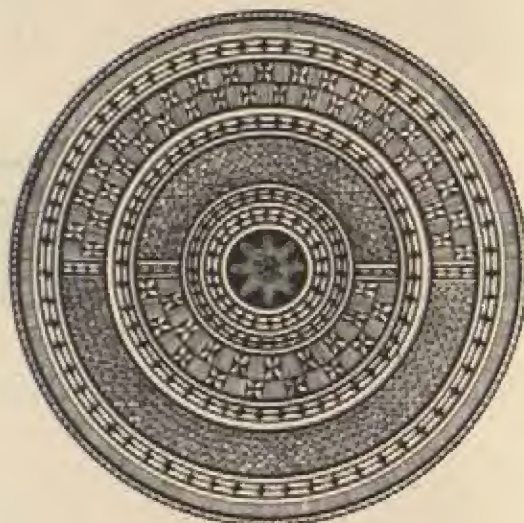


Pottery from the Area A Well.

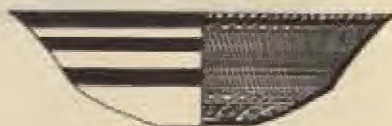
(Scale 1/10; Fig. 8—1/5)



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Pottery from Area A.

(Scale 1/5; Fig. 10—1/8; Fig. 12—3/10)



14



15



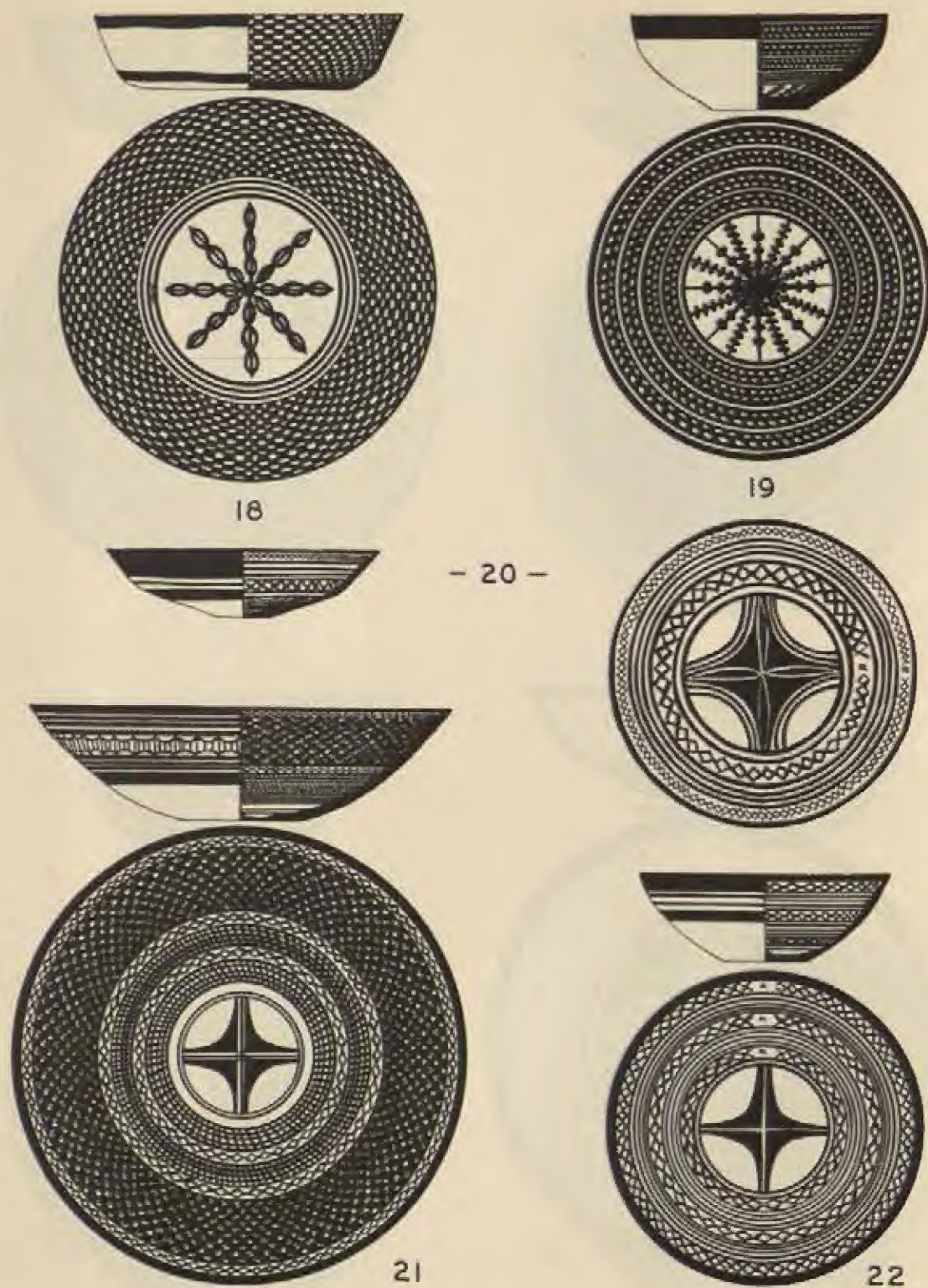
16



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Pottery from Area A.

(Scale Fig. 14—1/5; Fig. 15—2/5; Fig. 16—1/2; Fig. 17—3/10)



Pottery from Area A.

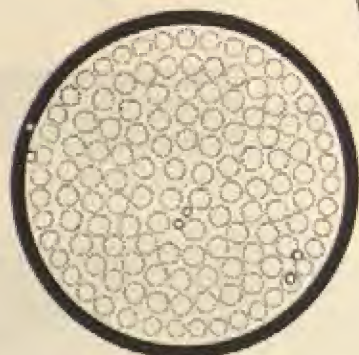
(Scale Figs. 18-19— $\frac{3}{10}$; Fig. 20— $\frac{1}{2}$; Figs. 21-22— $\frac{1}{5}$)



23



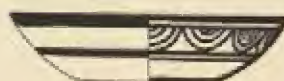
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25

W
HART
HALL

26



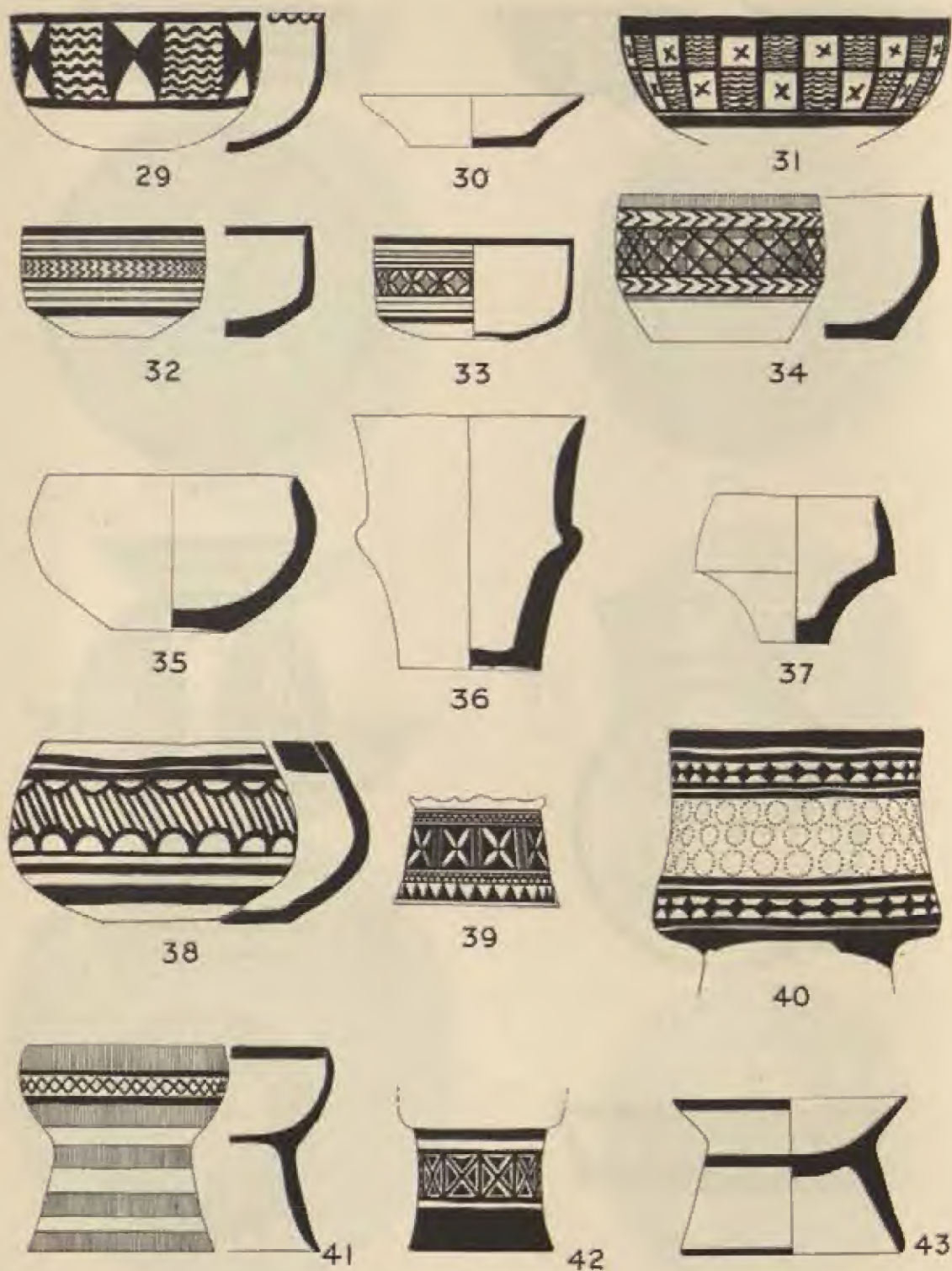
27



28

Pottery from Area A and the Northeast Base.

(Scale 3/10; Fig. 23—1/10; Fig. 28—1/5)



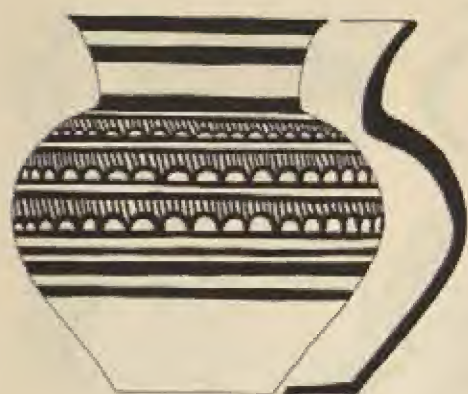
Pottery from Area A and the Northeast Base.

(Scale 1/2; Figs. 31-33, 39—1/5; Figs. 29, 41-42—3/10; Fig. 30—1/4)

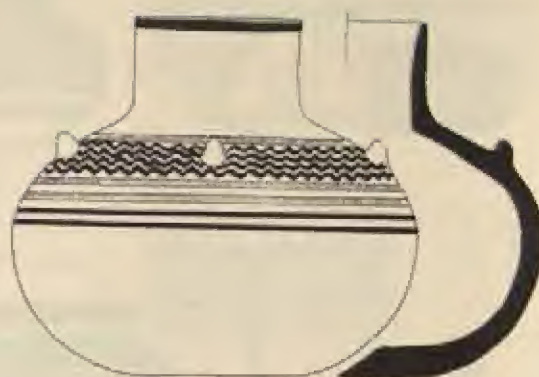


Pottery from Area A and the Northeast Base.

(Scale 1/5; Figs. 44, 45, 48—3/10; Fig. 52—1/4)



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DETAIL OF ORNAMENT IN ADDITIONAL
FRAME.



60

Pottery from Area A and the Northeast Base.

(Scale Figs. 55, 60—3/10; Figs. 56, 59—1/2; Figs. 57, 58—1/5)



61



Pottery jar from Area A.

(Scale of elevation—1/5; detail—1/2)



62



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66



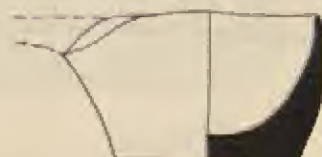
67



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70

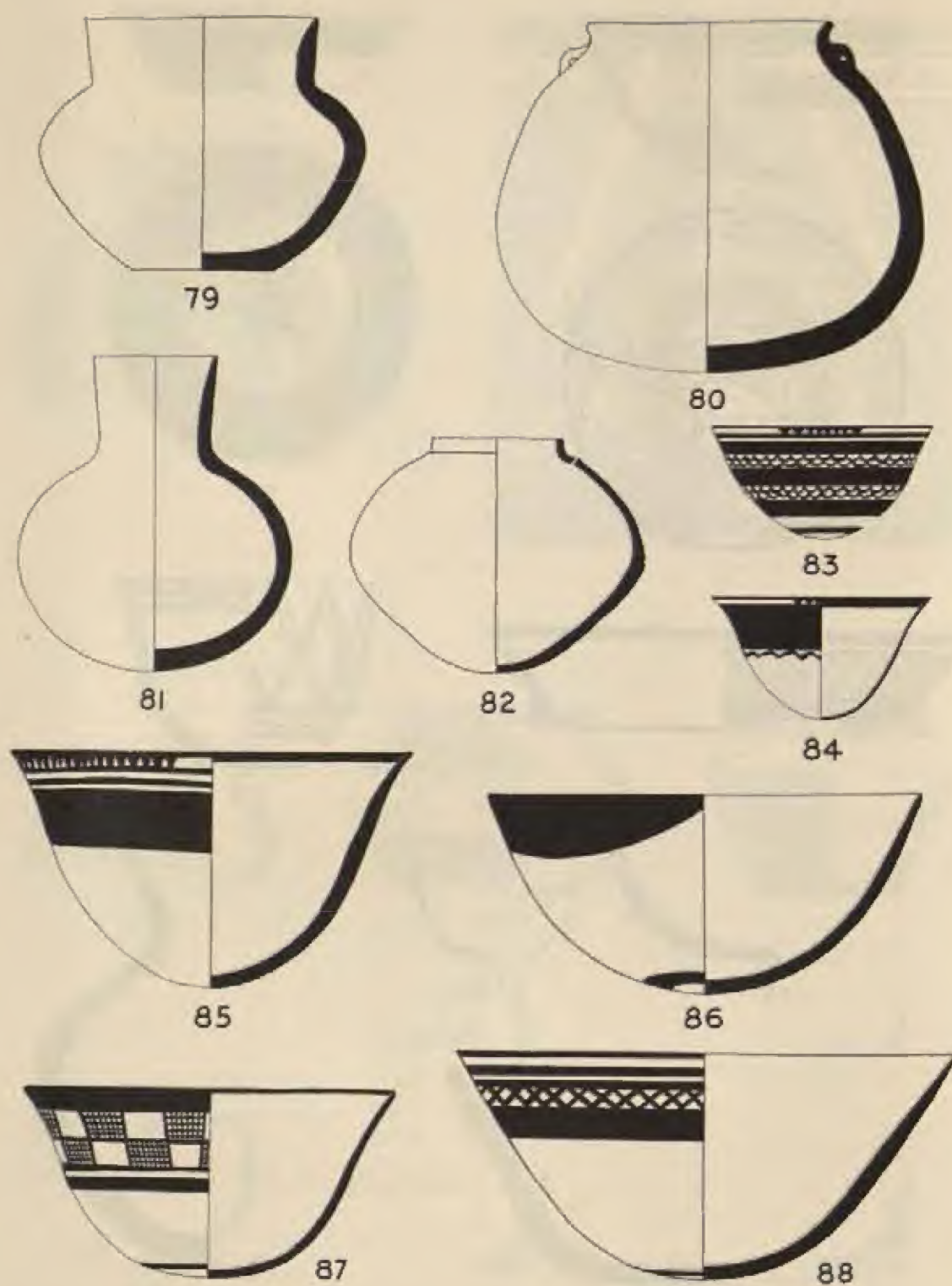
Pottery from Area A and the Northeast Base.

(Scale 1/2; elevation of Fig. 62—1/5)



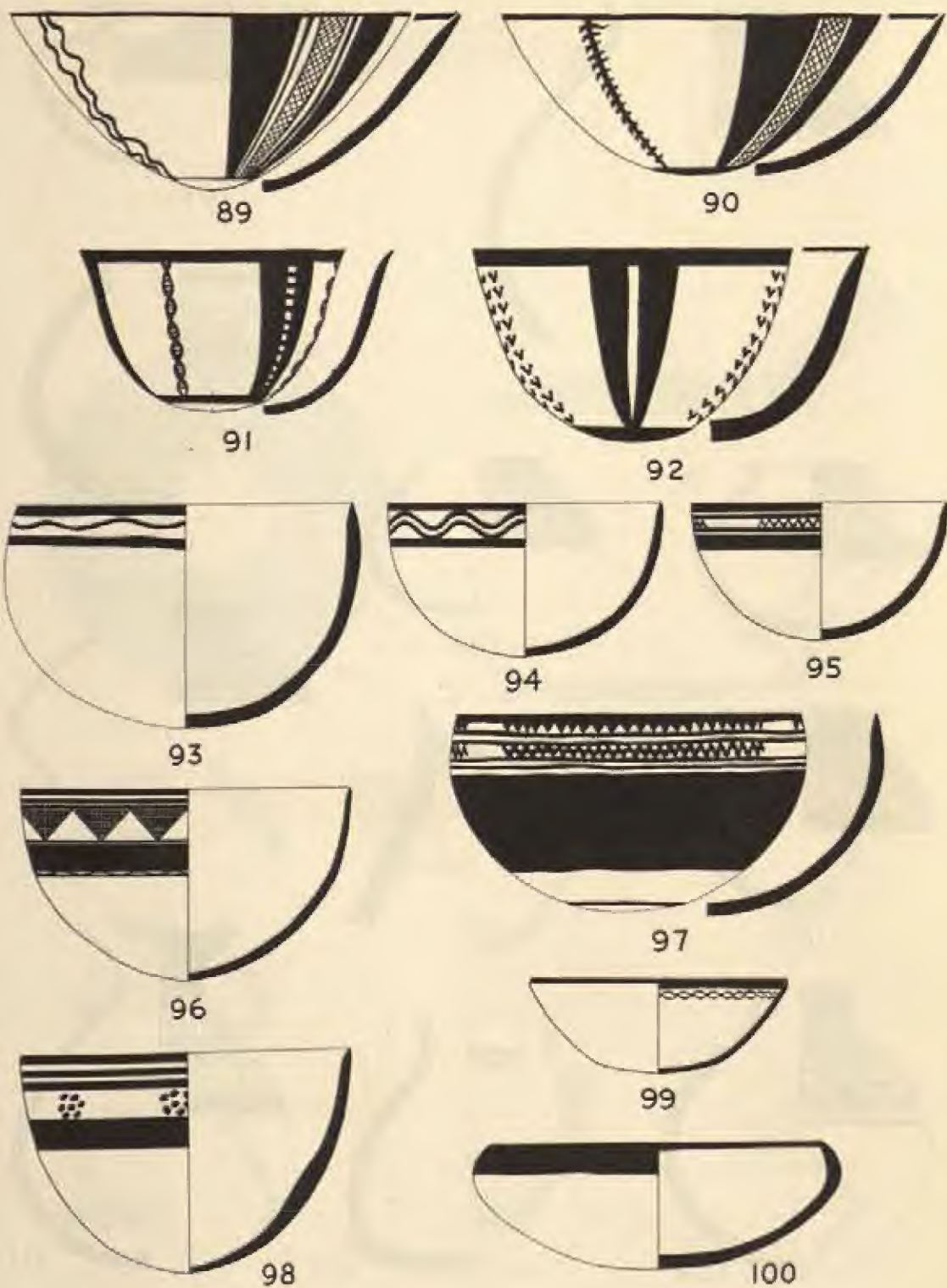
Pottery from Strata XX-XVII.

(Scale Figs. 71, 75, 77—1/4; Figs. 72, 73, 78—1/2; Fig. 74—3/10; Fig. 76—1/10)



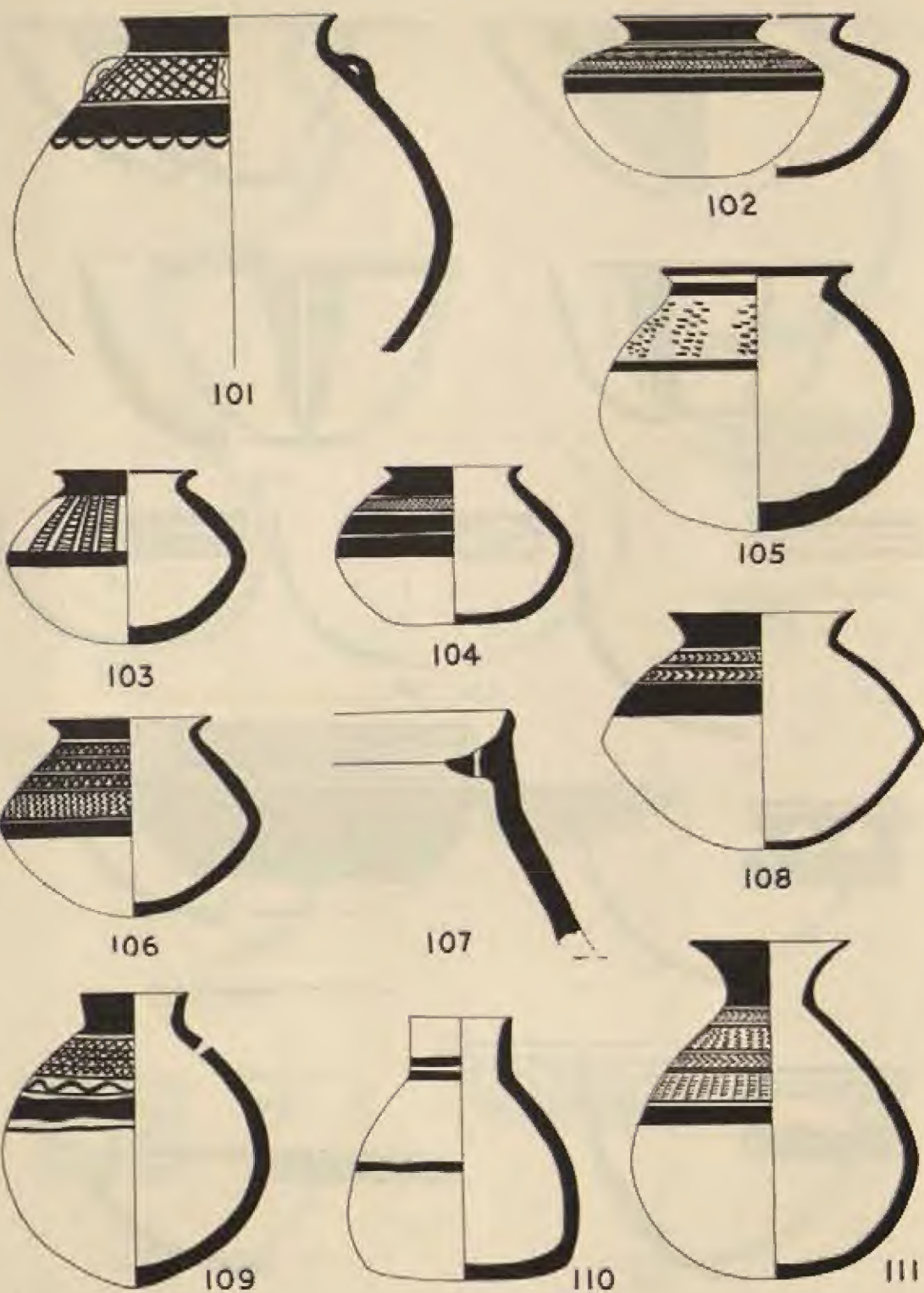
Pottery from Strata XX-XVII.

(Scale 1/2; Figs. 81, 83, 84, 87—1/4; Fig. 82—1/10)



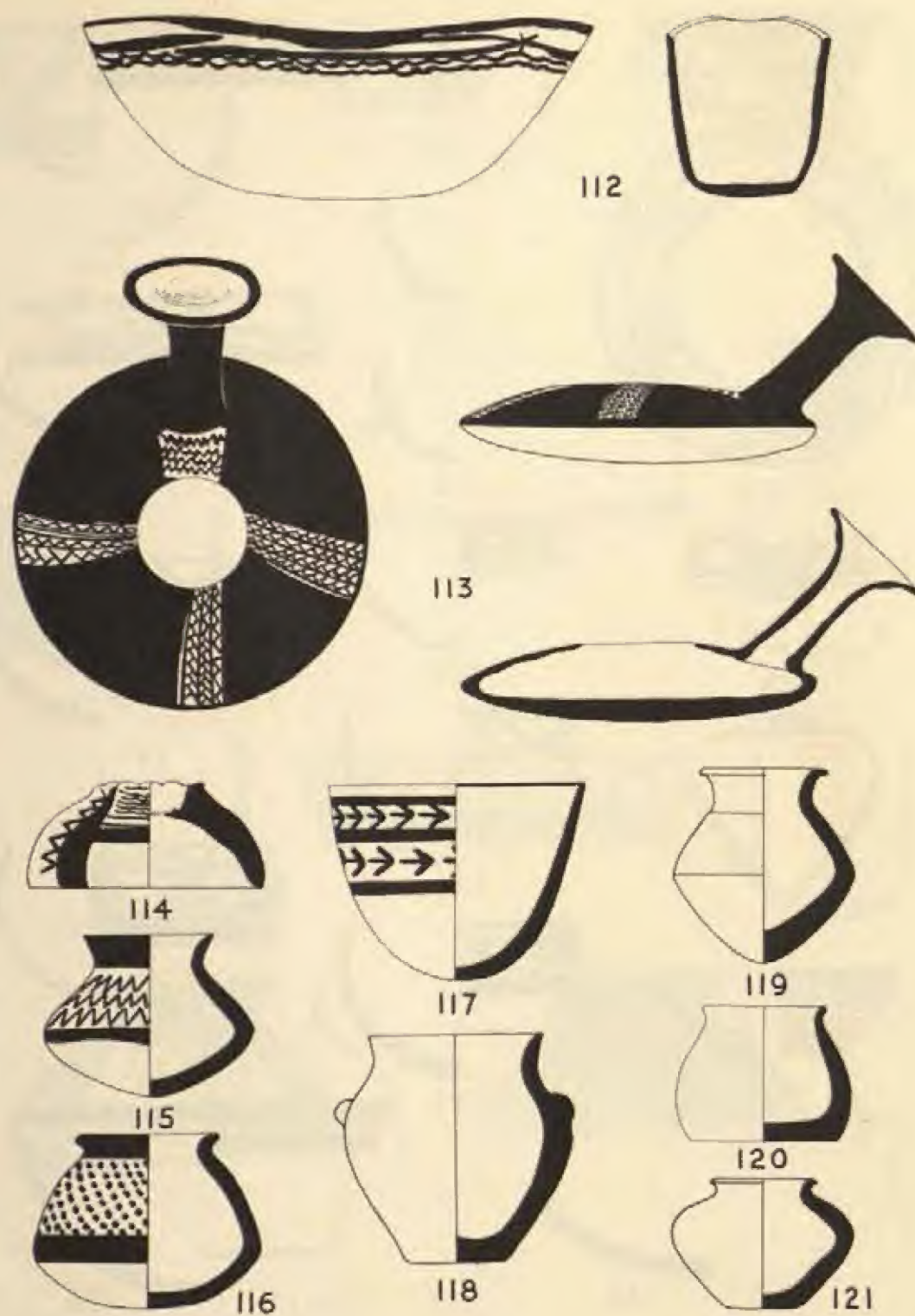
Pottery from Strata XX-XVII.

(Scale 1/4; Fig. 92—3/10; Figs. 97-98—1/2; Fig. 99—1/8)



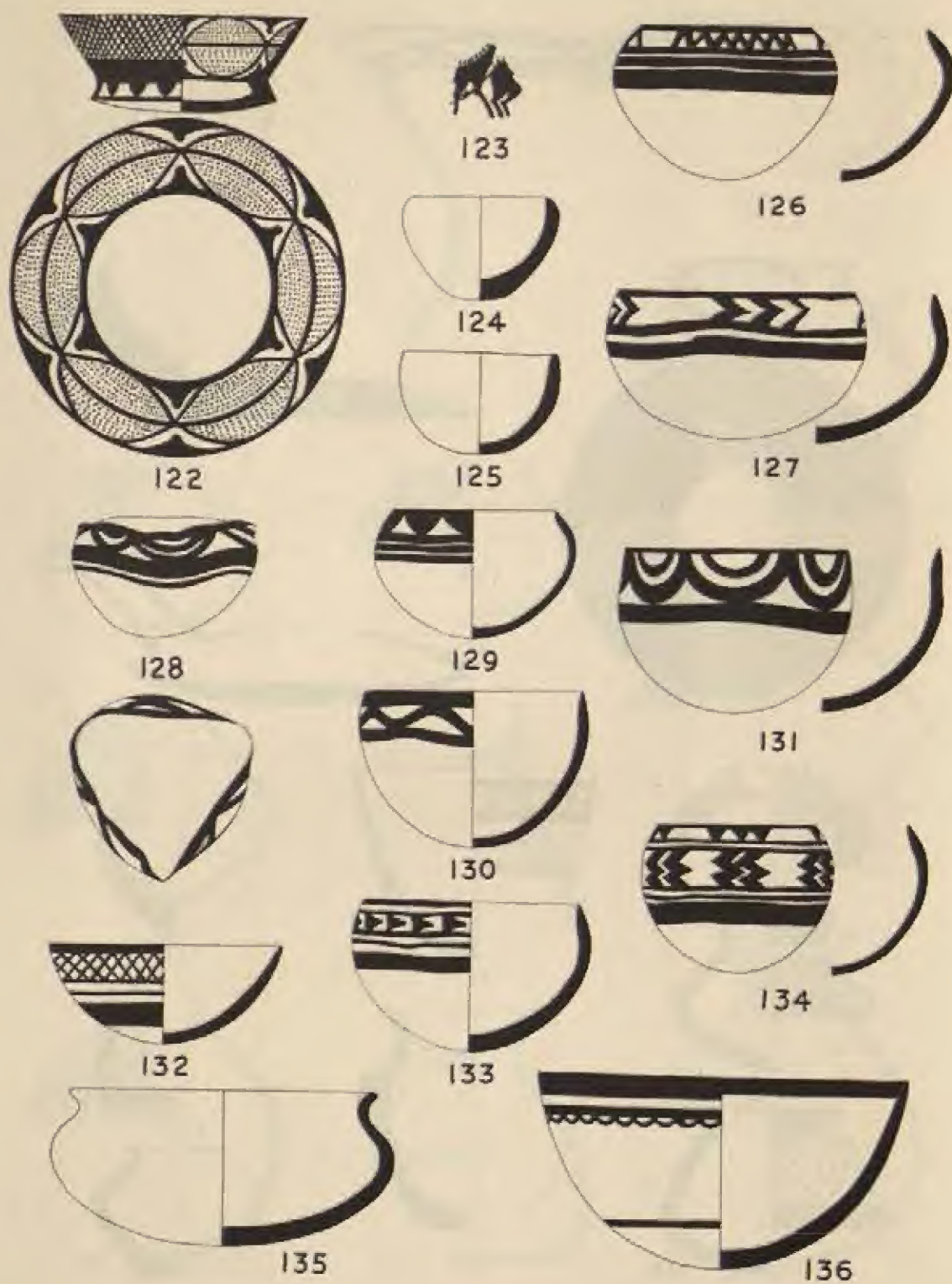
Pottery from Strata XX-XVII.

(Scale 1/4; Figs. 103, 108—3/10; Figs. 105, 107—1/2)



Pottery from Strata XX-XVII.

(Scale 1/2; Figs. 112-114—1/4)



Pottery from Strata XVI-XV.

(Scale 1/4; Fig. 122—3/10; Fig. 123—1/2; Fig. 125—1/5; Fig. 130—1/3)



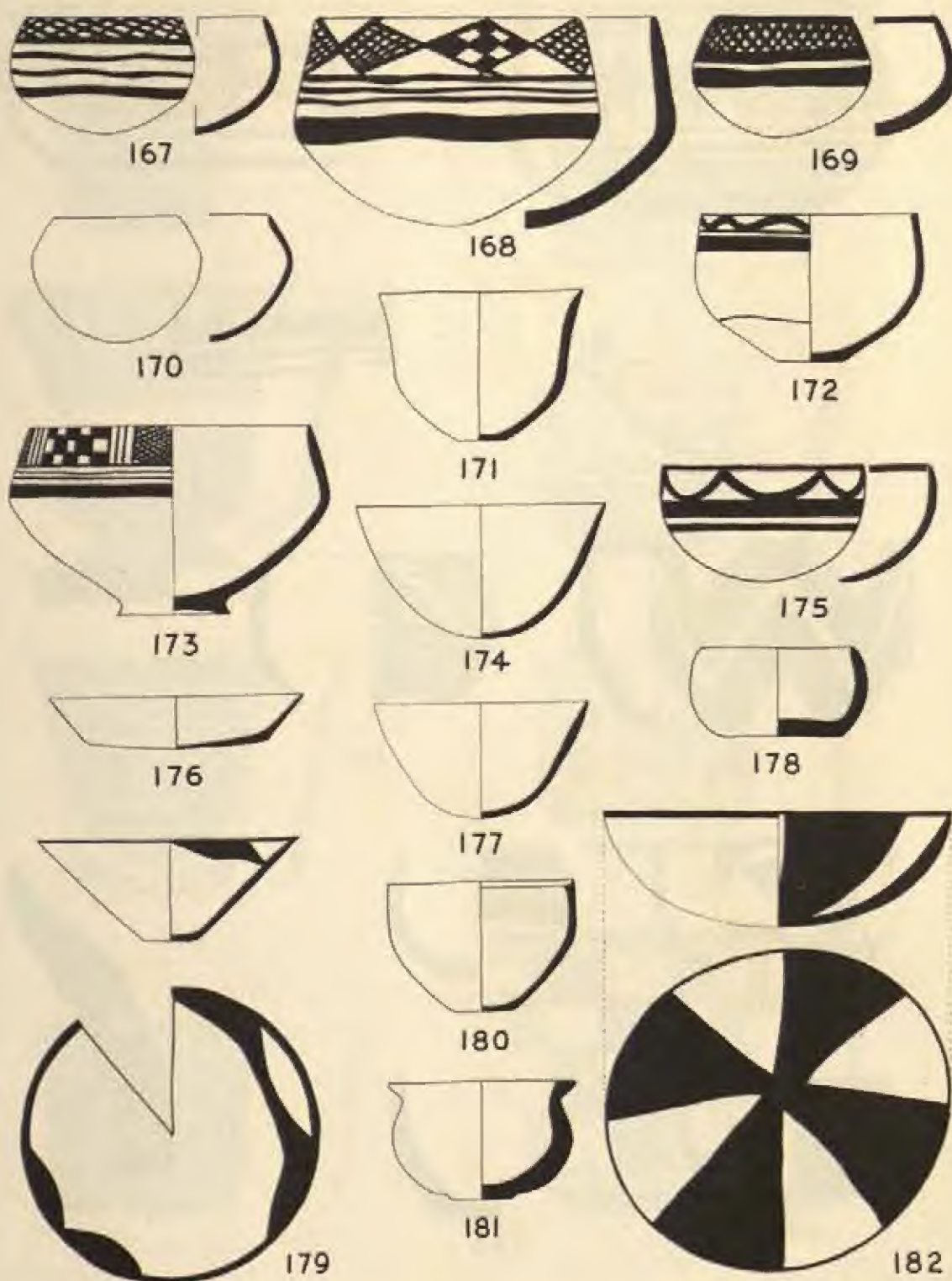
Pottery from Strata XVI-XV.

(Scale Figs. 137, 139, 144—1/2; Figs. 138, 145, 147—1/4; Figs. 140-143, 148, 149—3/10; Fig. 146—1/6)



Pottery from Strata XVI-XV.

(Scale 1/2; Figs. 150, 157—1/5; Figs. 151, 156—3/10; Figs. 152, 153, 158—1/4)

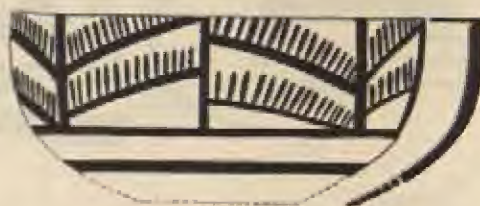


Pottery from Stratum XIII.

(Scale Figs. 167, 181— $3/10$; Figs. 168, 182— $1/2$; Figs. 169, 170, 174–176, 178— $1/5$;
Figs. 171, 172, 179, 180— $1/10$; Fig. 173— $1/4$; Fig. 177— $1/8$)



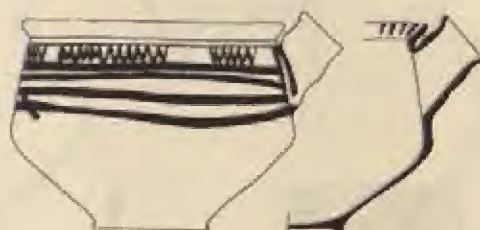
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Pottery from Stratum XIII.

(Scale 1/2; Fig. 185—1/4; Fig. 186—1/5; Figs. 189-191—3/10)



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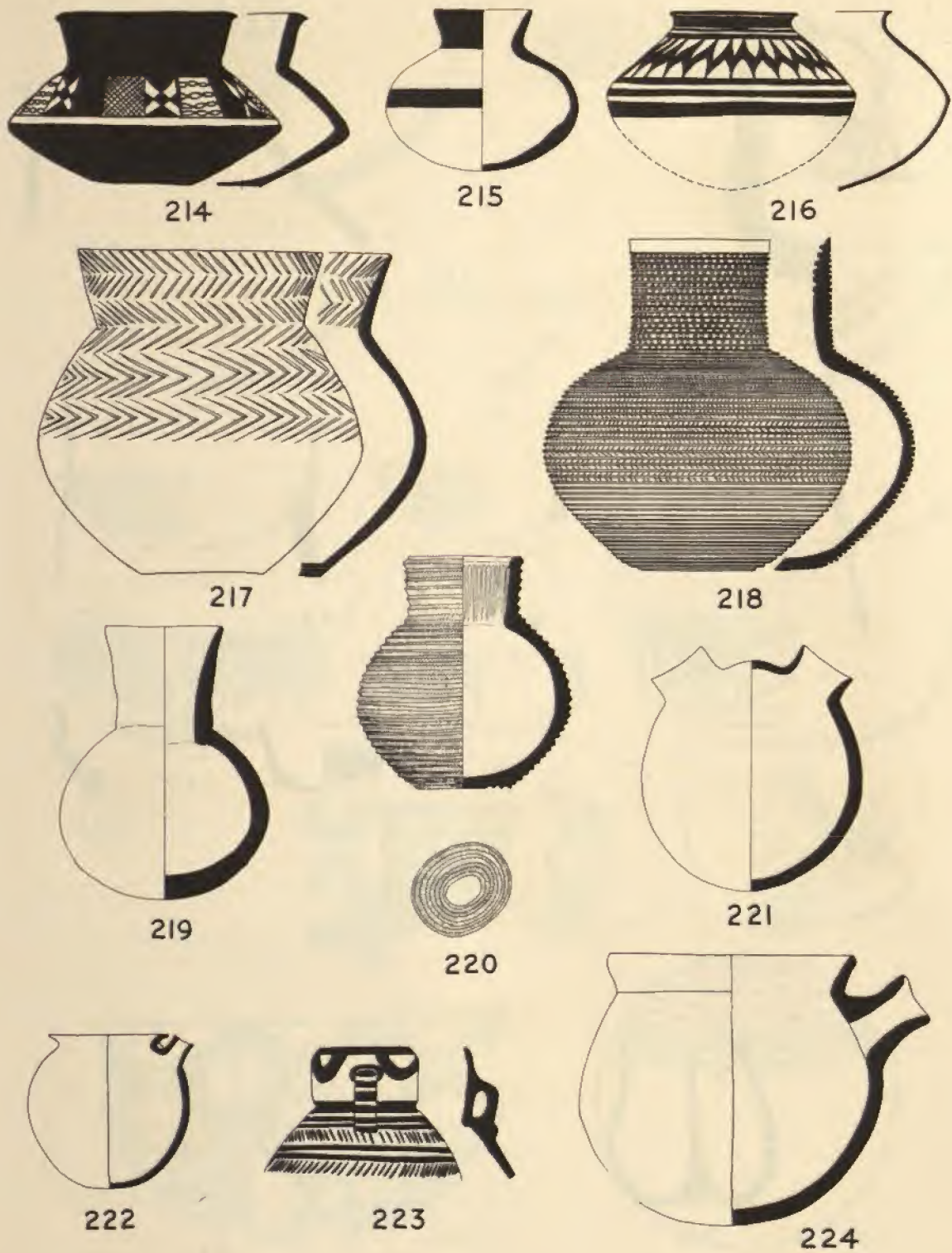
Pottery from Stratum XIII.

(Scale 1/2; Fig. 195—1/4; Figs. 199, 200—3/10; Fig. 210—1/5)



Pottery from Stratum XIII.

(Scale Figs. 203, 206, 213— $\frac{1}{4}$; Figs. 204, 207, 209— $\frac{3}{10}$; Figs. 205, 208, 212— $\frac{1}{5}$;
Fig. 210— $\frac{1}{10}$; Fig. 211— $\frac{1}{2}$)



Pottery from Stratum XIII.

(Scale Fig. 214—1/2; Figs. 215, 219, 220—1/4; Figs. 216, 223, 224—1/5; Figs. 217, 218—3/10; Fig. 221—1/6; Fig. 222—1/10)



225



226



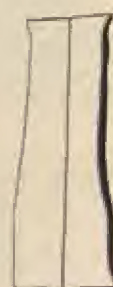
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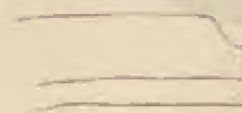
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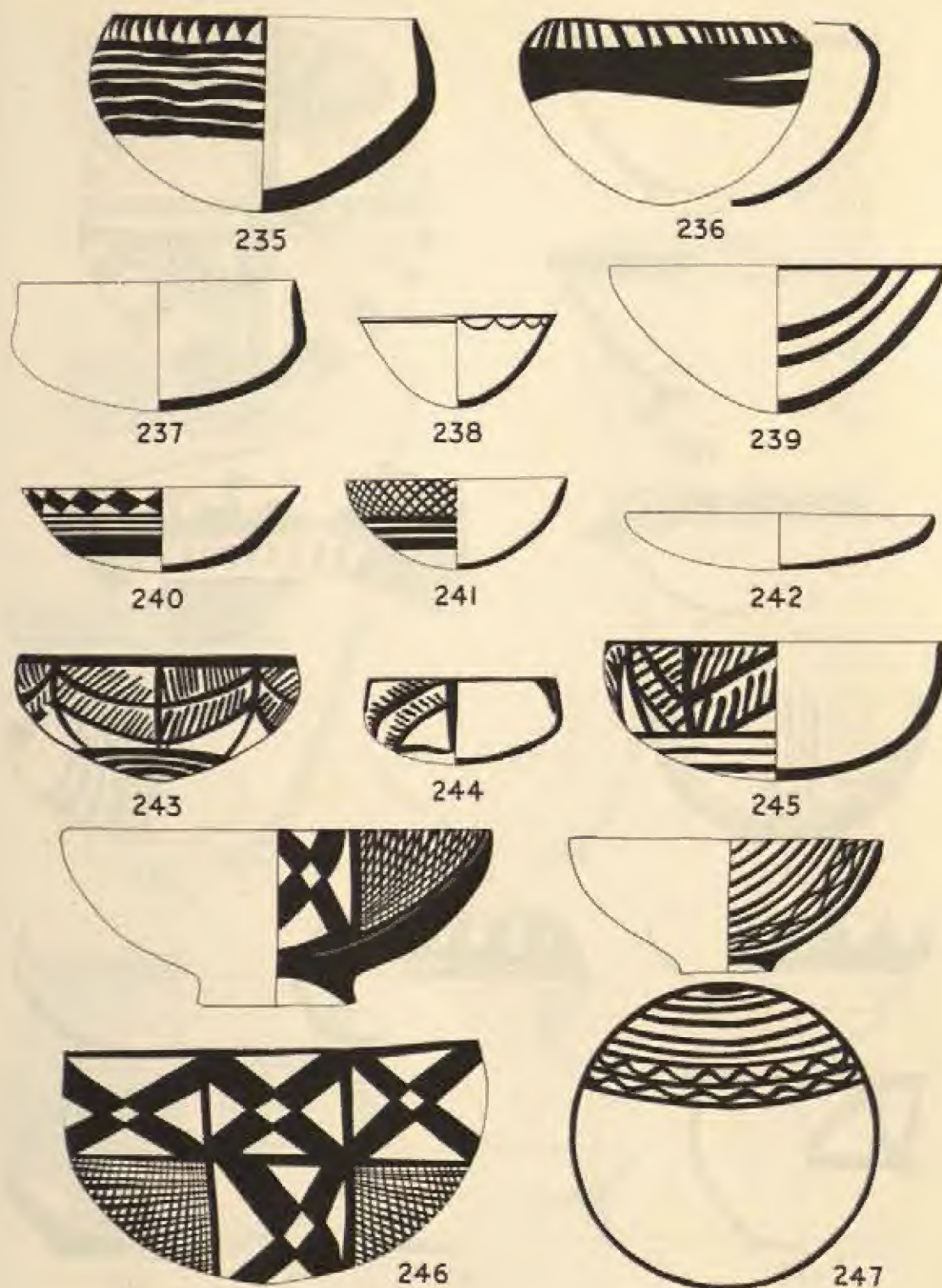
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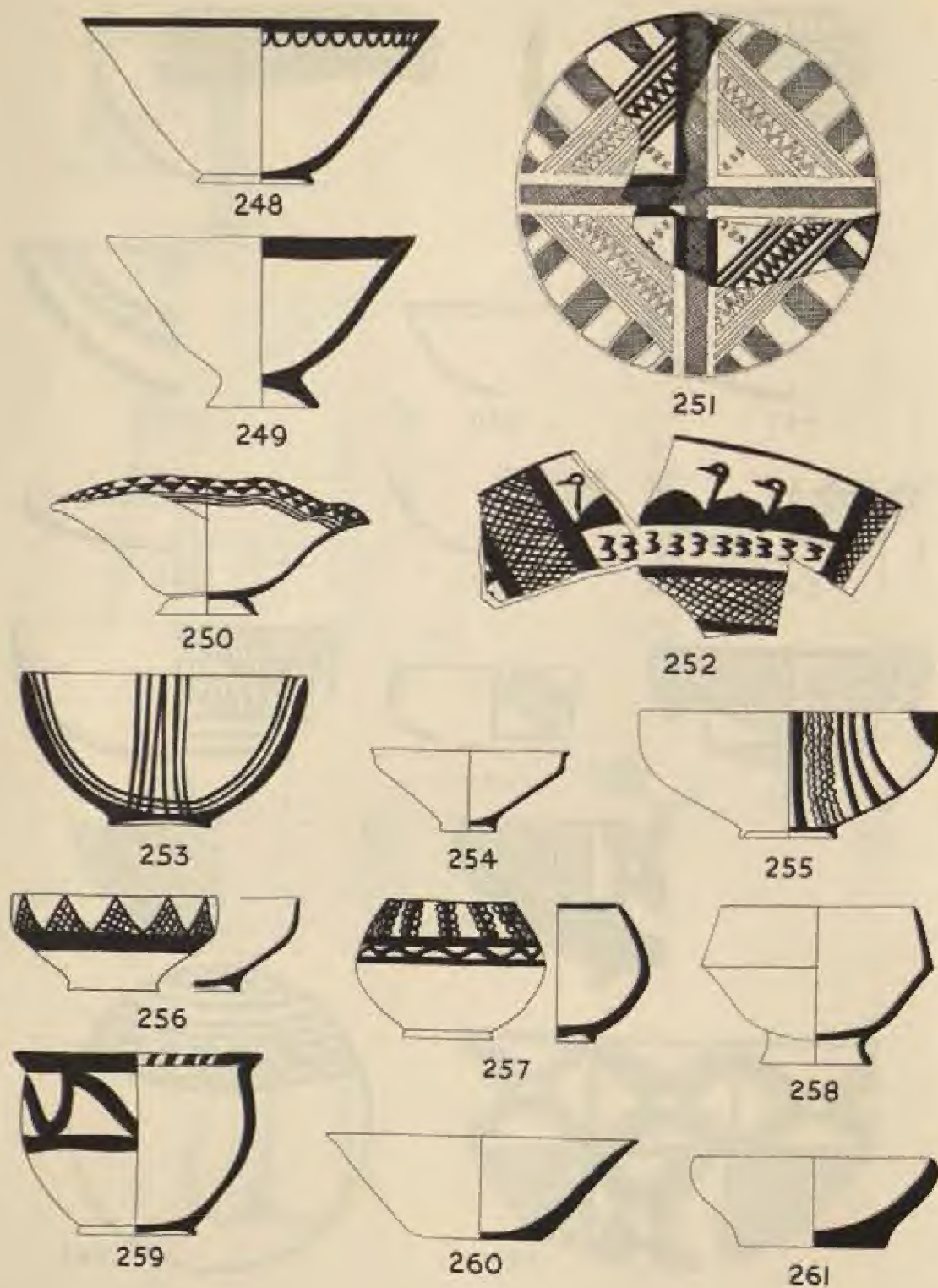
Pottery from Stratum XIII.

(Scale 1/2; Fig. 226—1/4; Figs. 227—229—1/5; Fig. 230—1/10)



Pottery from Strata XII-A and XII.

(Scale 1/2; Figs. 237, 239-242—1/4; Fig. 238—1/10; Fig. 247—1/5)



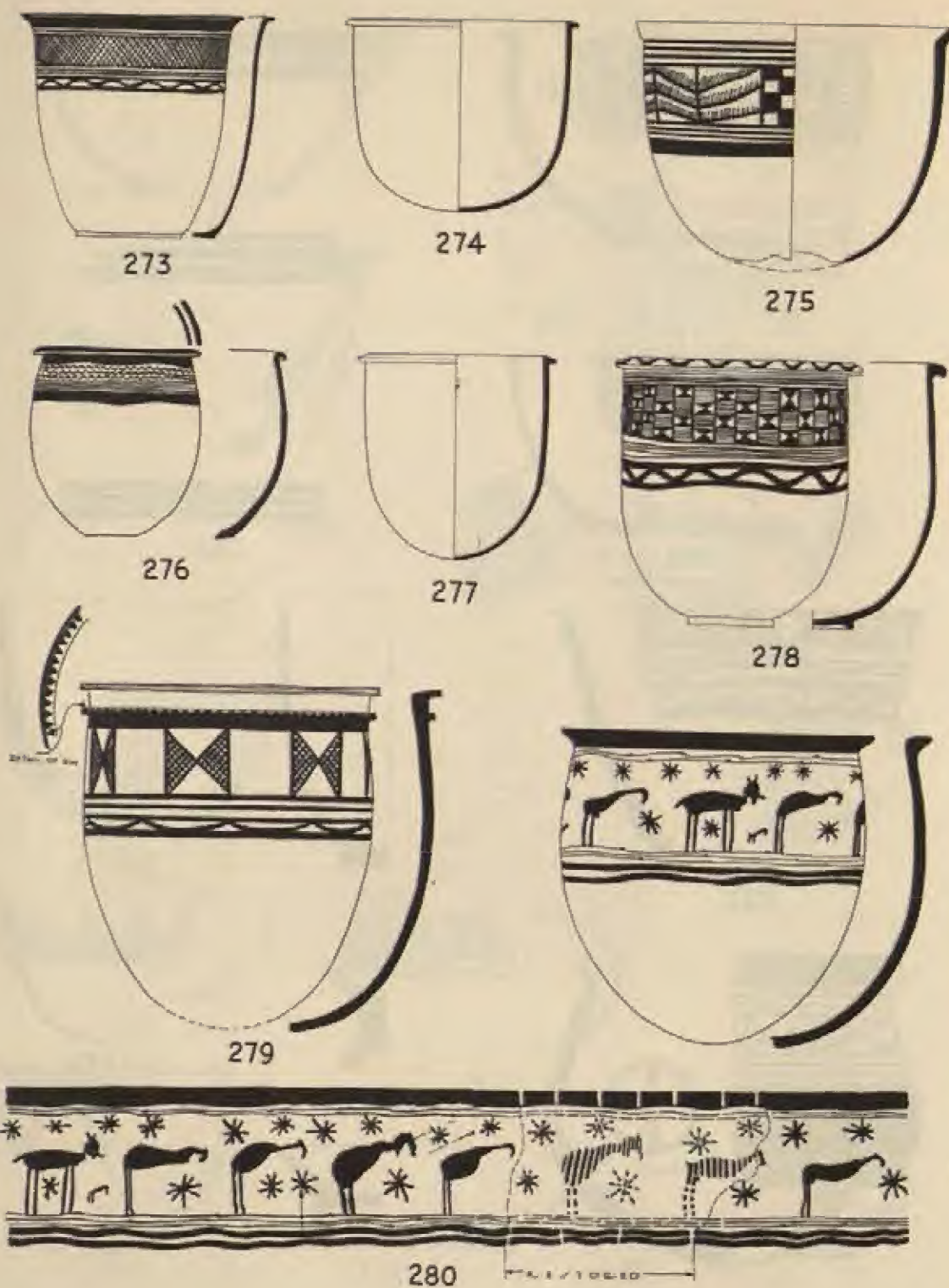
Pottery from Strata XII-A and XII.

(Scale 1/5; Fig. 252—1/2; Fig. 257—1/10; Figs. 251, 260-261—1/4)



Pottery from Strata XII-A and XII.

(Scale Figs. 262, 263, 268—1/5; Fig. 264—1/10; Figs. 265, 266, 269—1/2; Figs. 267, 270—272—1/4)



Pottery from Strata XII-A and XII.

(Scale 1/10; Figs. 274, 277—1/16; Fig. 275—1/8; Fig. 276—1/20)



281



282



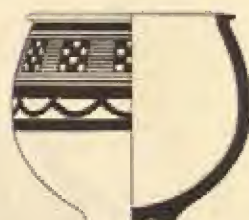
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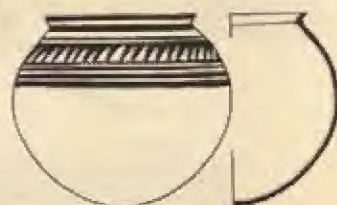
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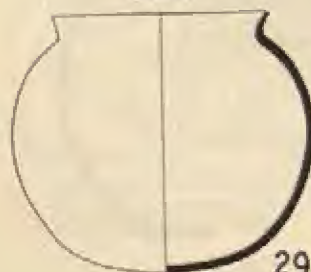
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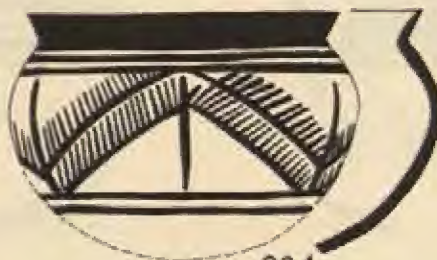
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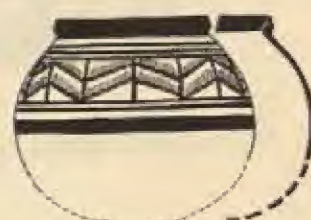
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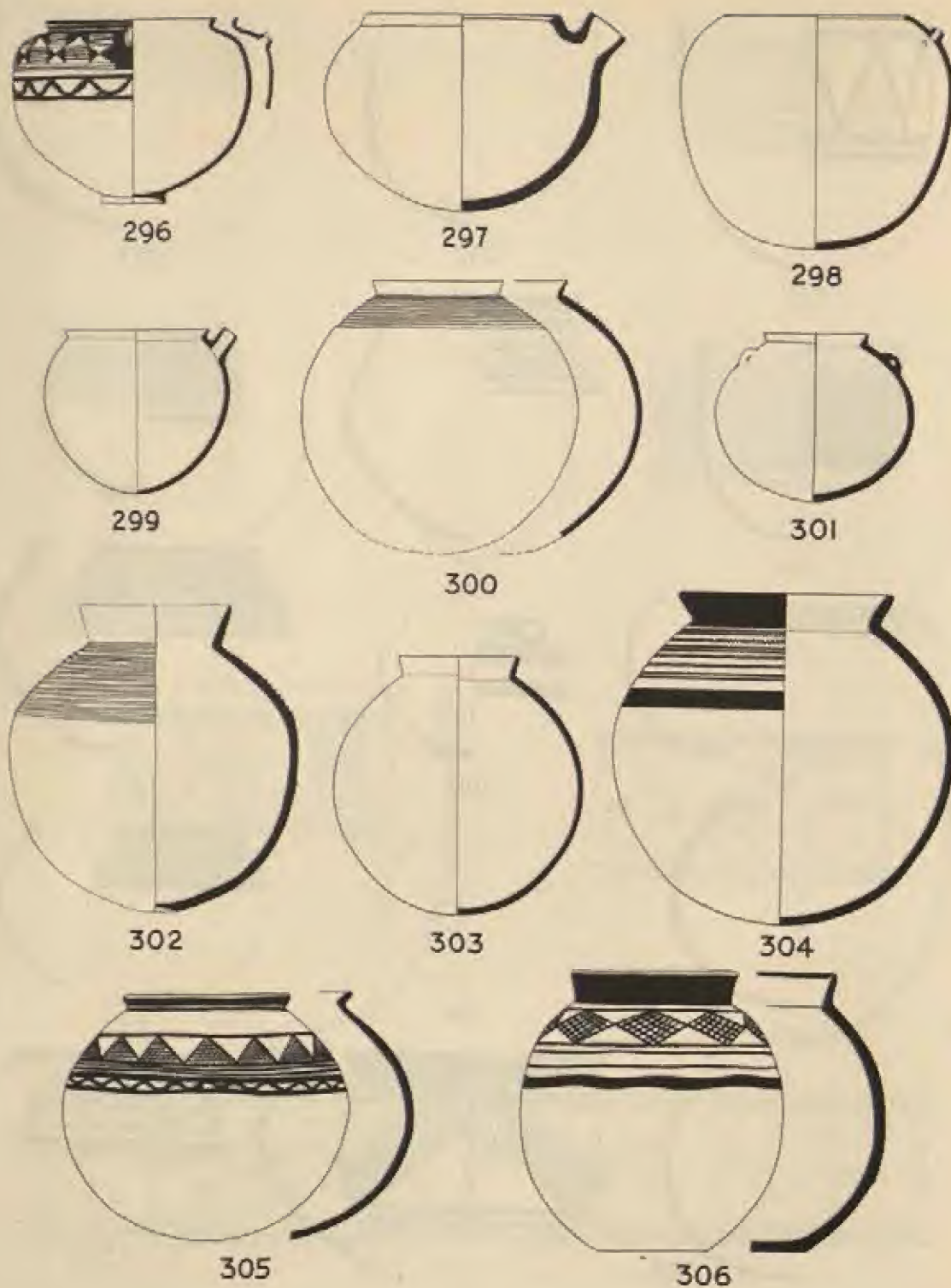
294



295

Pottery from Strata XII-A and XII.

(Scale 1/10; Figs. 281-283, 286, 290, 293—1/8; Fig. 284—1/16; Fig. 294—3/10)



Pottery from Strata XII-A and XII.

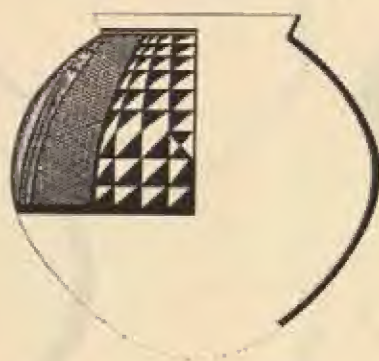
(Scale Figs. 296, 300, 301, 305, 306—1/10; Figs. 297, 302—1/5; Figs. 298, 299, 303, 304—1/8)



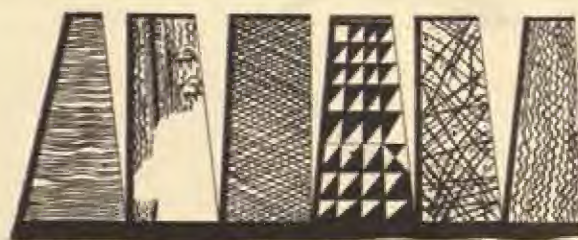
307



308



309



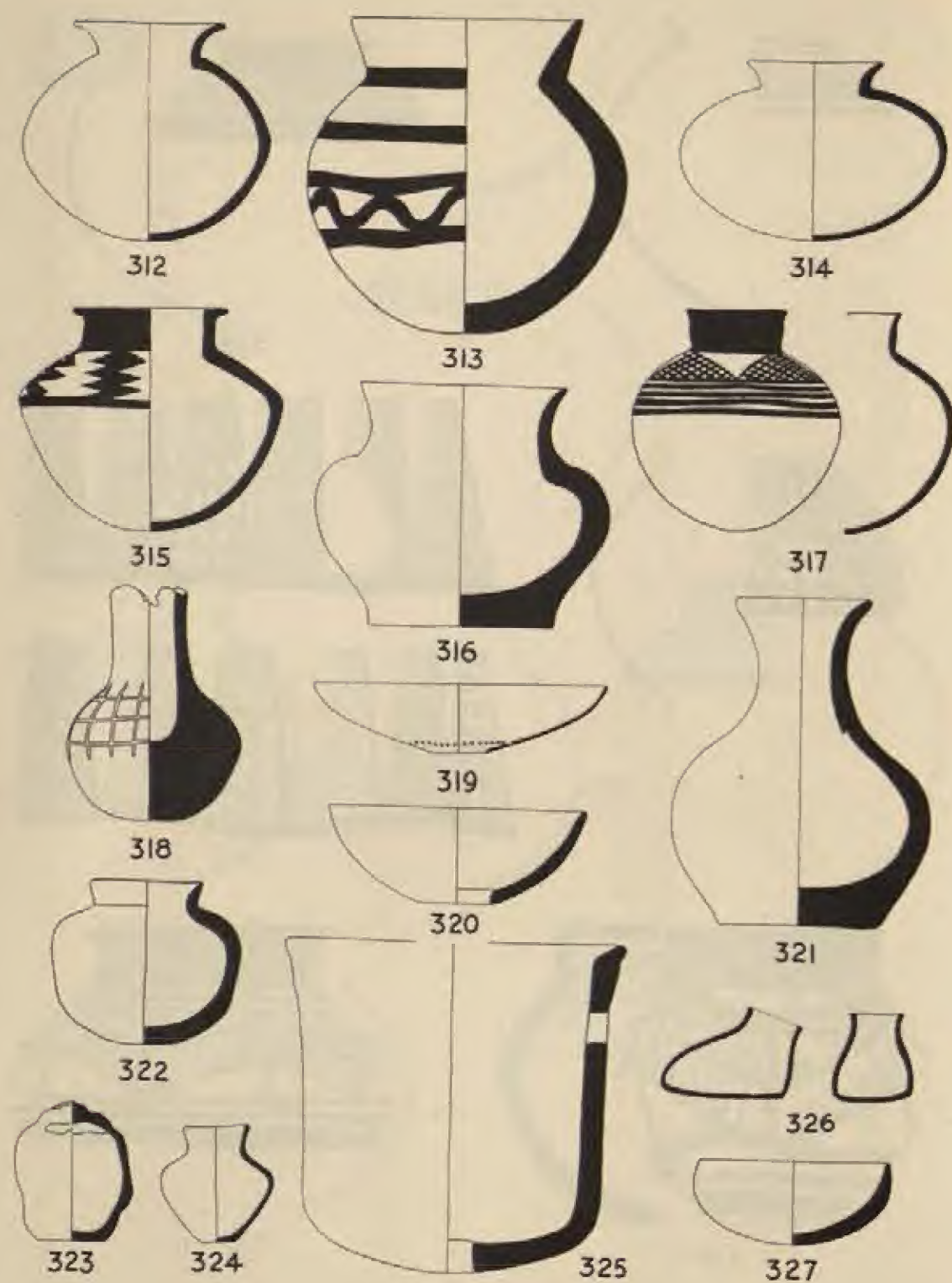
310



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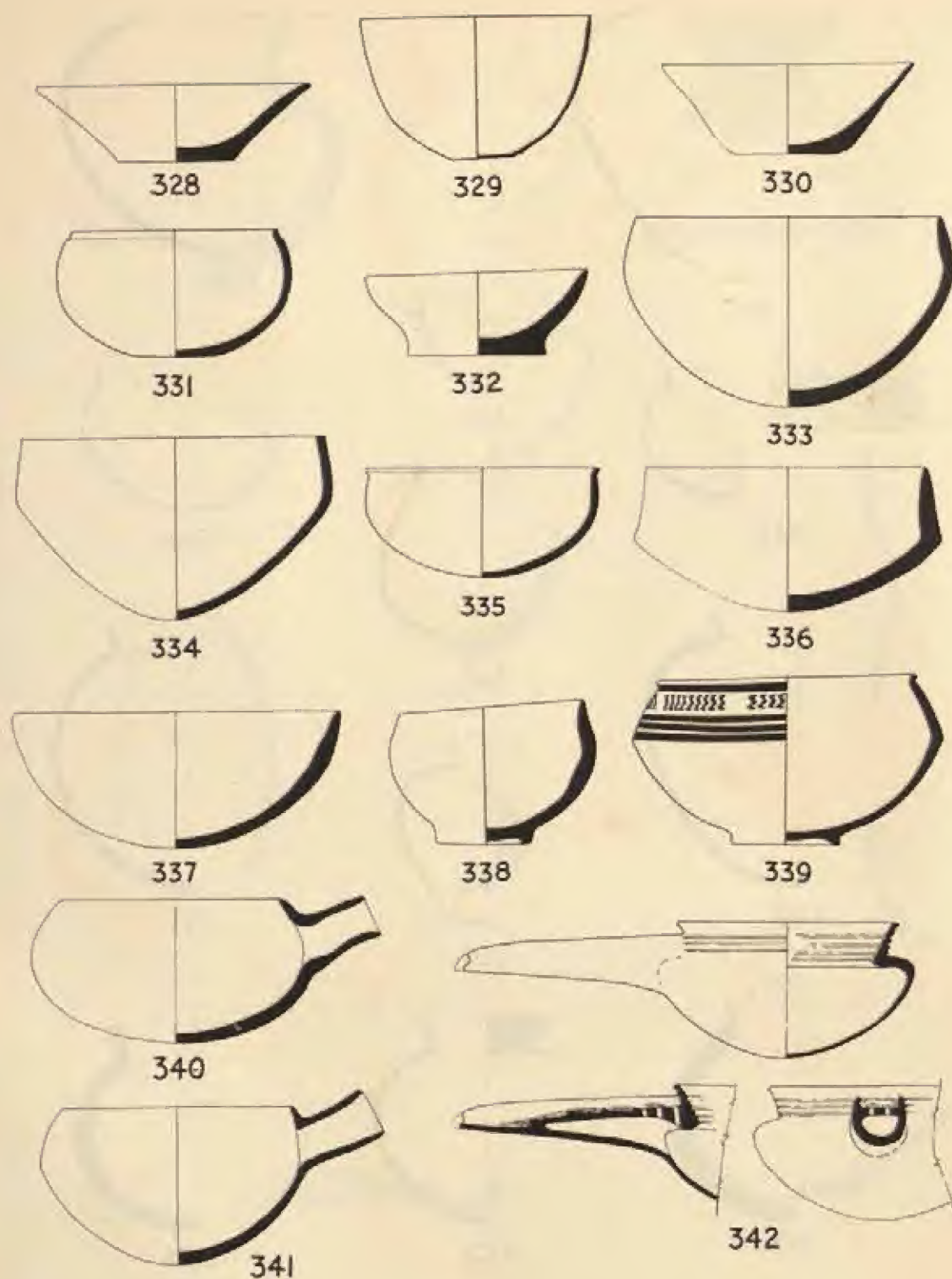
Pottery from Strata XII-A and XII.

(Scale Fig. 307—1/8; Figs. 308, 309—1/10; Figs. 310, 311—1/2)



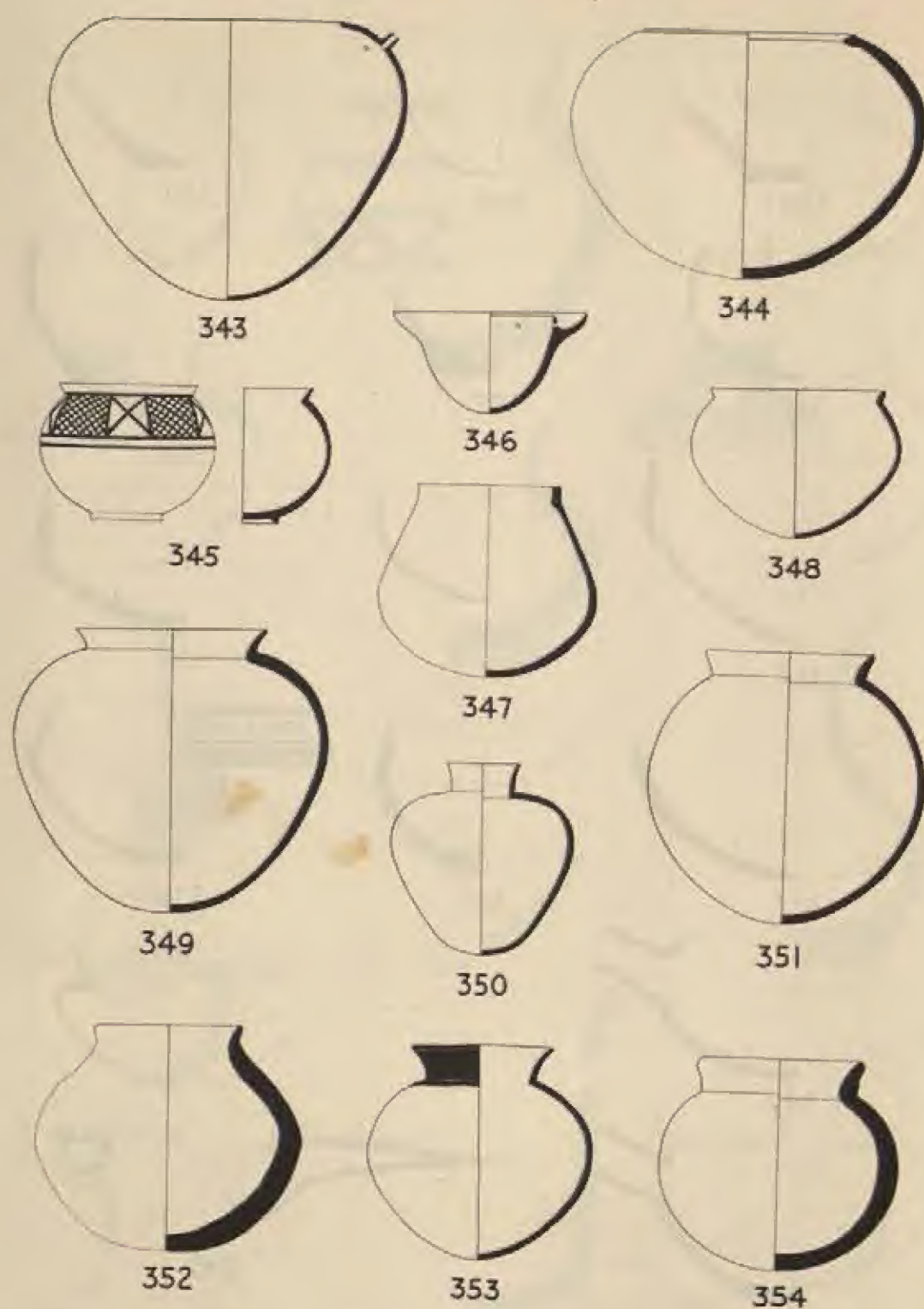
Pottery from Strata XII-A and XII.

(Scale 1/2; Figs. 312, 314, 325—1/4; Figs. 317, 319, 323—1/5; Fig. 326—1/10; Fig. 320—1/8)



Pottery from Stratum XI-A.

(Scale 1/4; Fig. 329—1/10; Fig. 335—1/8; Figs. 334, 336—1/2)



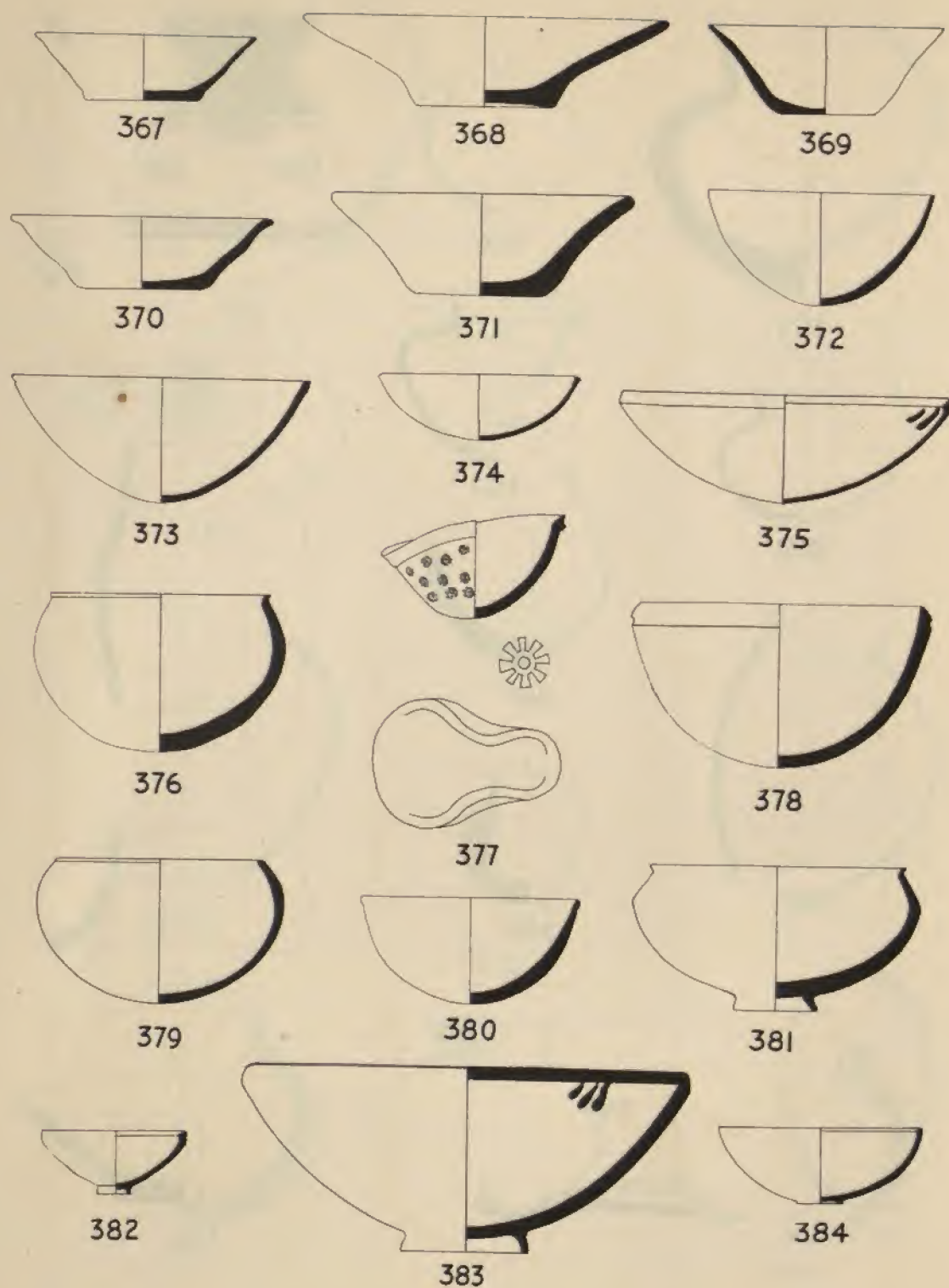
Pottery from Stratum XI-A.

(Scale Figs. 343, 345, 347, 351—1/8; Figs. 344, 354—1/4; Figs. 346, 350—1/16;
Figs. 348, 353—1/5; Fig. 352—1/2)



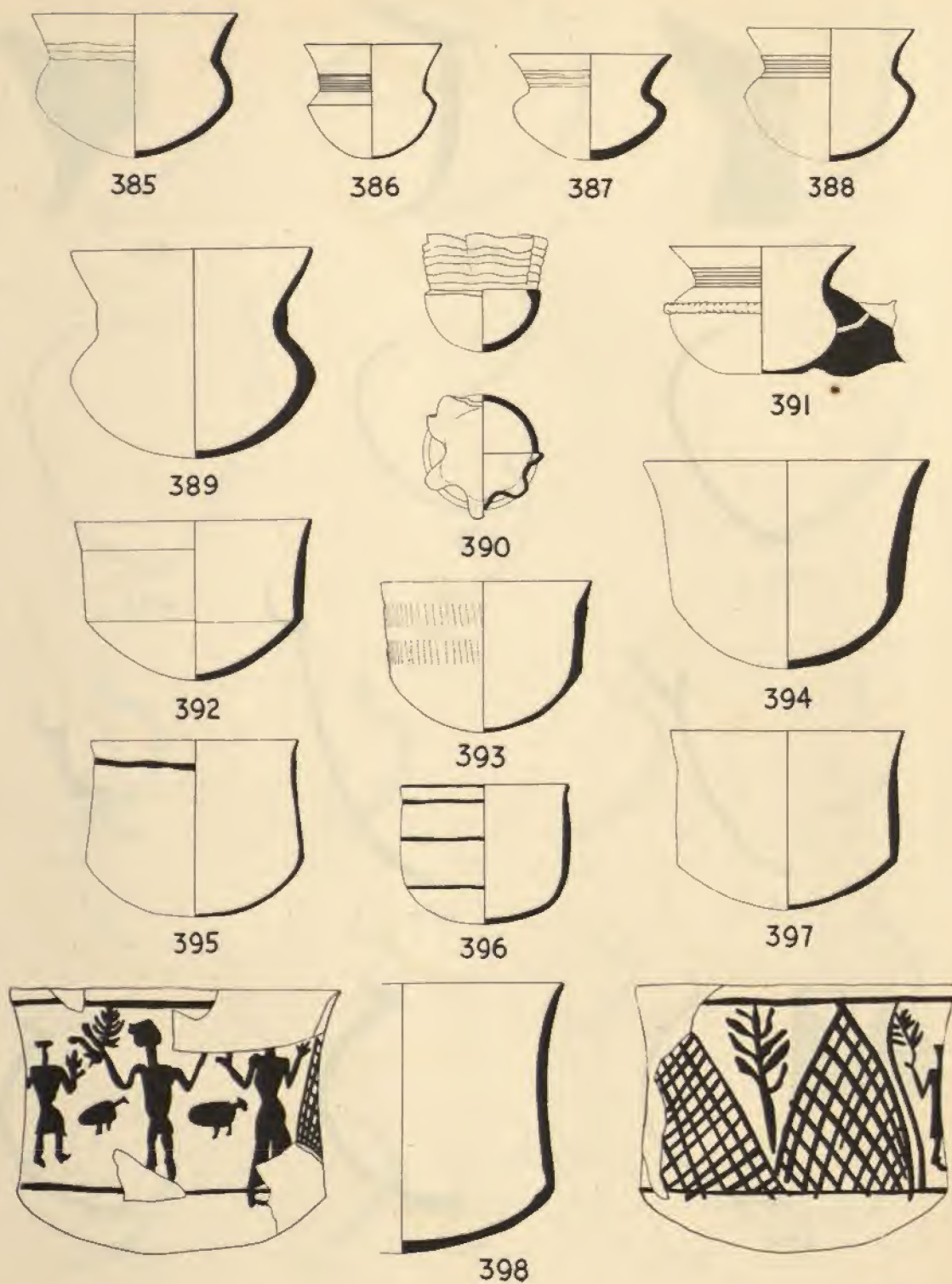
Pottery from Stratum XI-A.

(Scale 1/2; Figs. 356, 360, 365—1/8; Figs. 358, 363—1/5; Figs. 357 (section and plan), 359—1/4)



Pottery from Strata XI-IX.

(Scale 1/8; Figs. 368, 371, 375, 383—1/5; Figs. 373, 376, 377, 379-381—1/4)

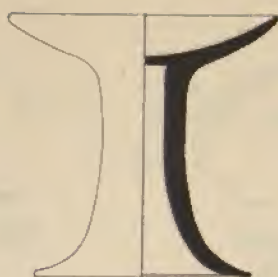


Pottery from Strata XI-IX.

(Scale 1/4; Figs. 386, 396—1/5; Figs. 389, 394—1/2; Fig. 395—1/8)



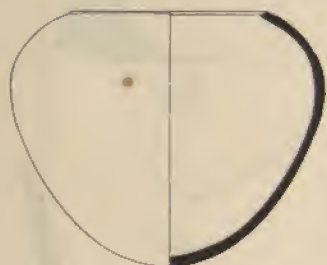
399



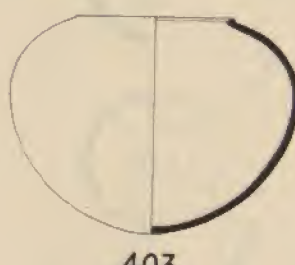
400



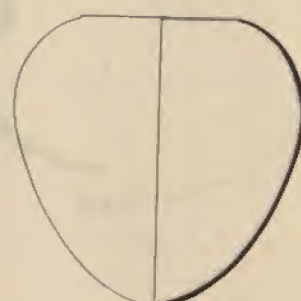
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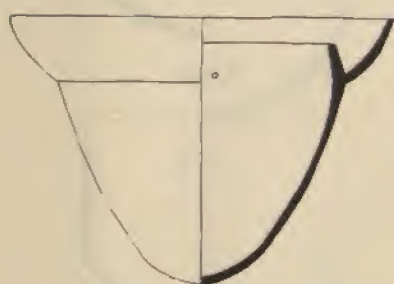
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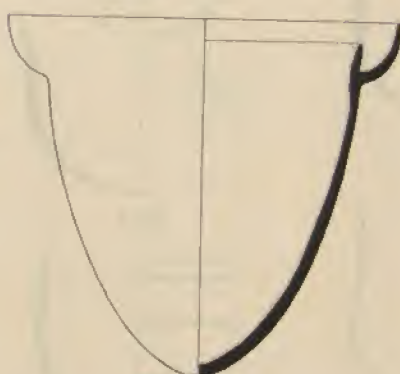
403



404



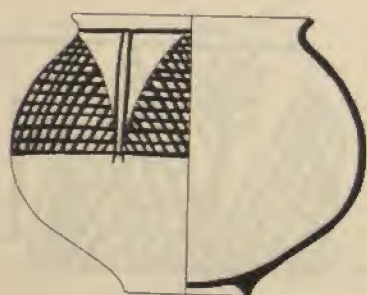
405



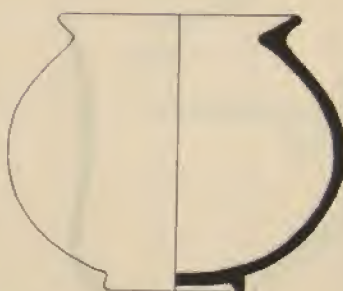
406



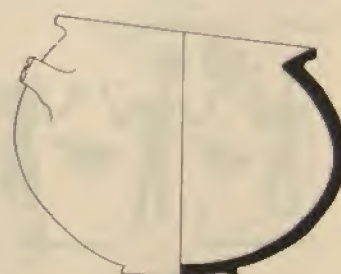
407



408



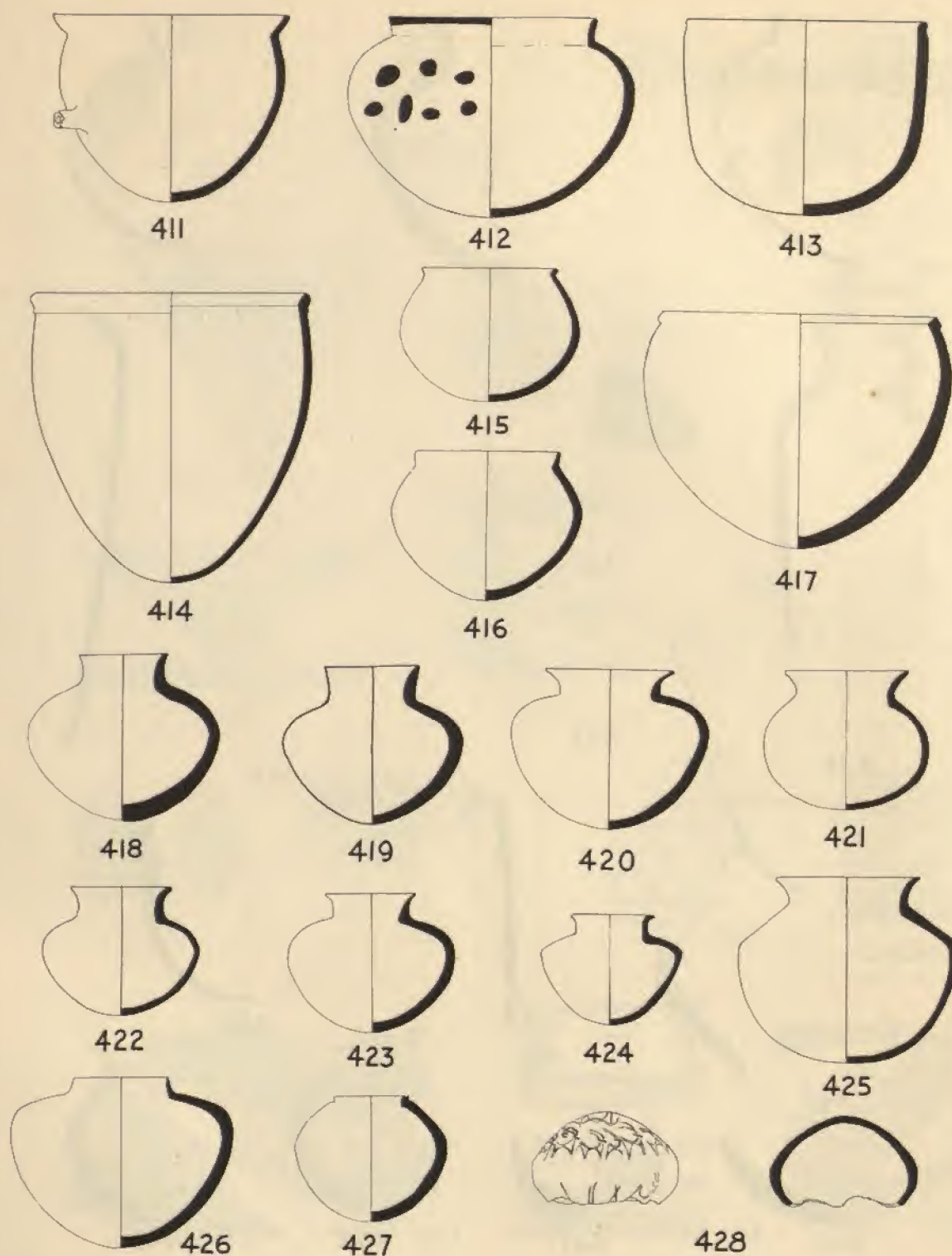
409



410

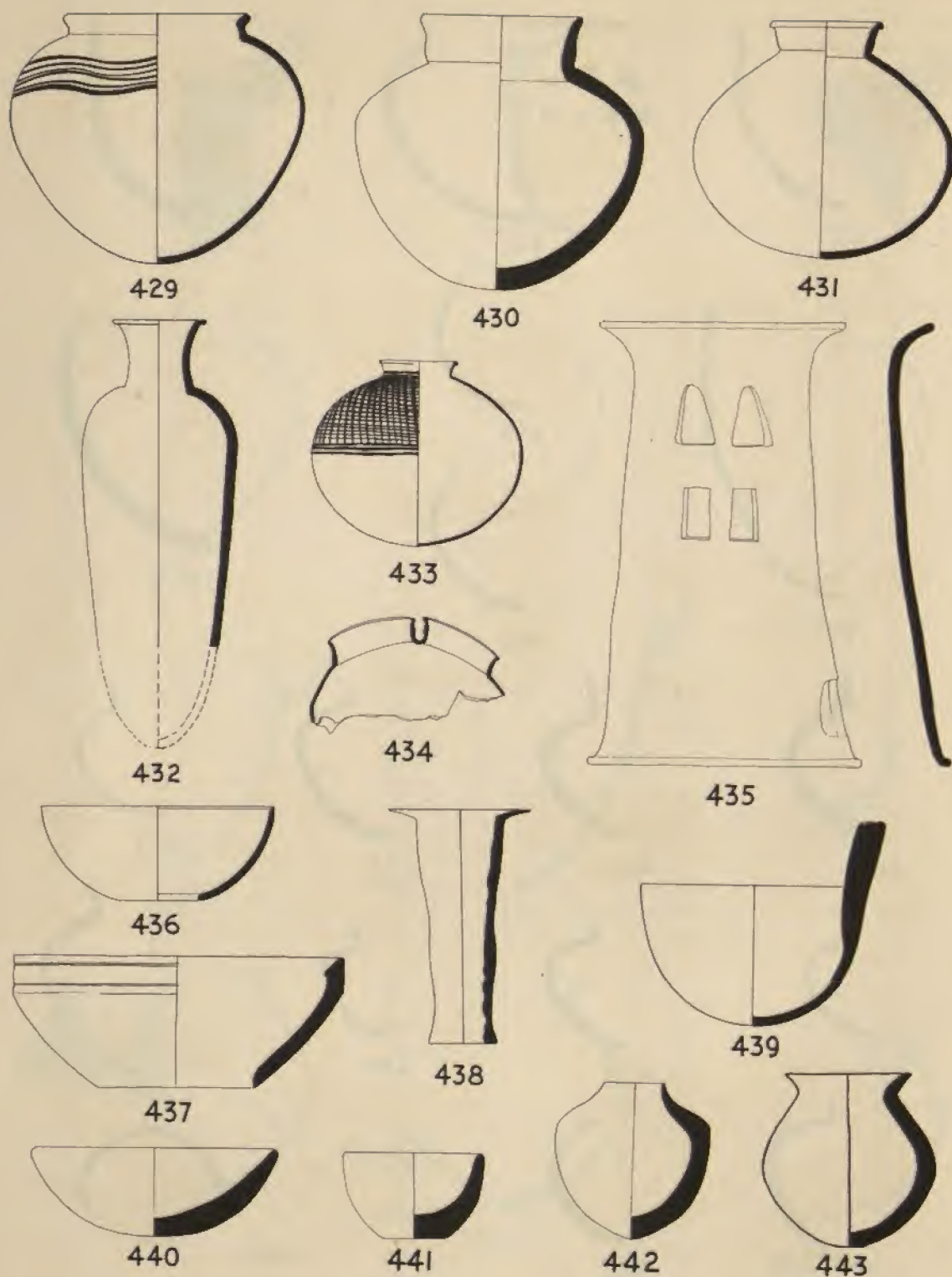
Pottery from Strata XI-IX.

(Scale Figs. 399, 401—1/2; Figs. 400, 407-410—1/5; Figs. 402-404—1/8; Figs. 405, 406—1/10)



Pottery from Strata XI-IX.

(Scale Fig. 411—1/10; Figs. 412, 415, 418, 420, 423, 425, 426—1/4; Figs. 413, 417—1/8; Fig. 414—1/16; Figs. 416, 421, 422, 424, 427, 428—1/5; Fig. 419—3/10)



Pottery from Strata XI-IX.

(Scale Figs. 429, 431, 434, 436, 438—1/8; Figs. 430, 440-443—1/2; Figs. 432, 435—1/10;
Figs. 433, 437—1/5; Fig. 439—1/4)



444



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Painted pottery fragments from Strata XVI and XV.

(Scale 1/2)



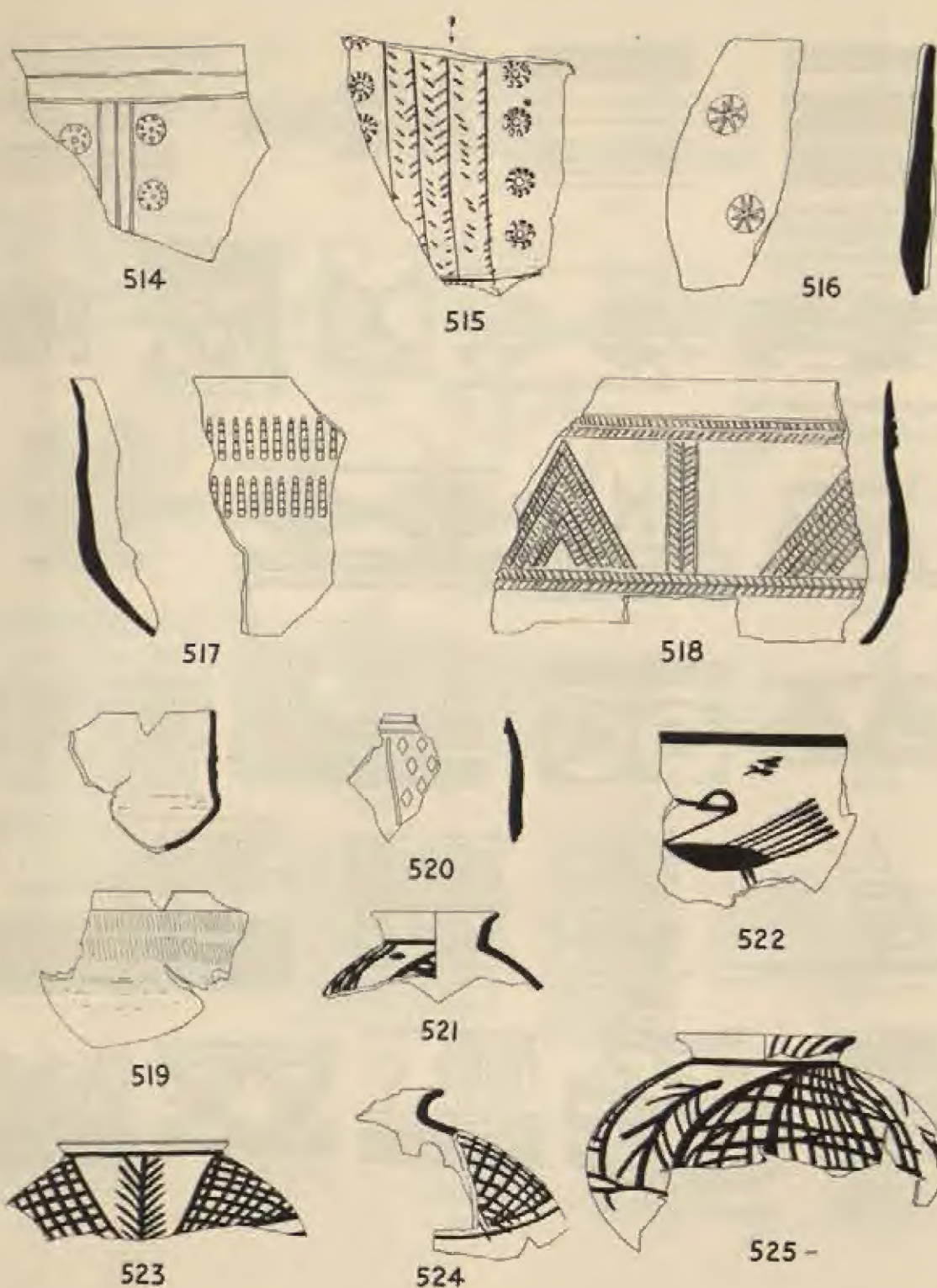
Painted pottery fragments from Stratum XIII.

(No scale)



Painted pottery fragments from Stratum XIII.

(No scale)



Decorated sherds from Strata XI-IX.

(Scale Figs. 514-518, 522—1/2; Figs. 519-521, 523-525—1/4)



1



2



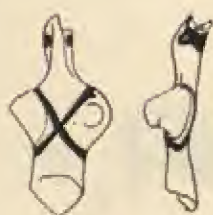
3



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11

Terra cotta human figurines.

(Scale 1/2; Fig. 11—1/5)



12



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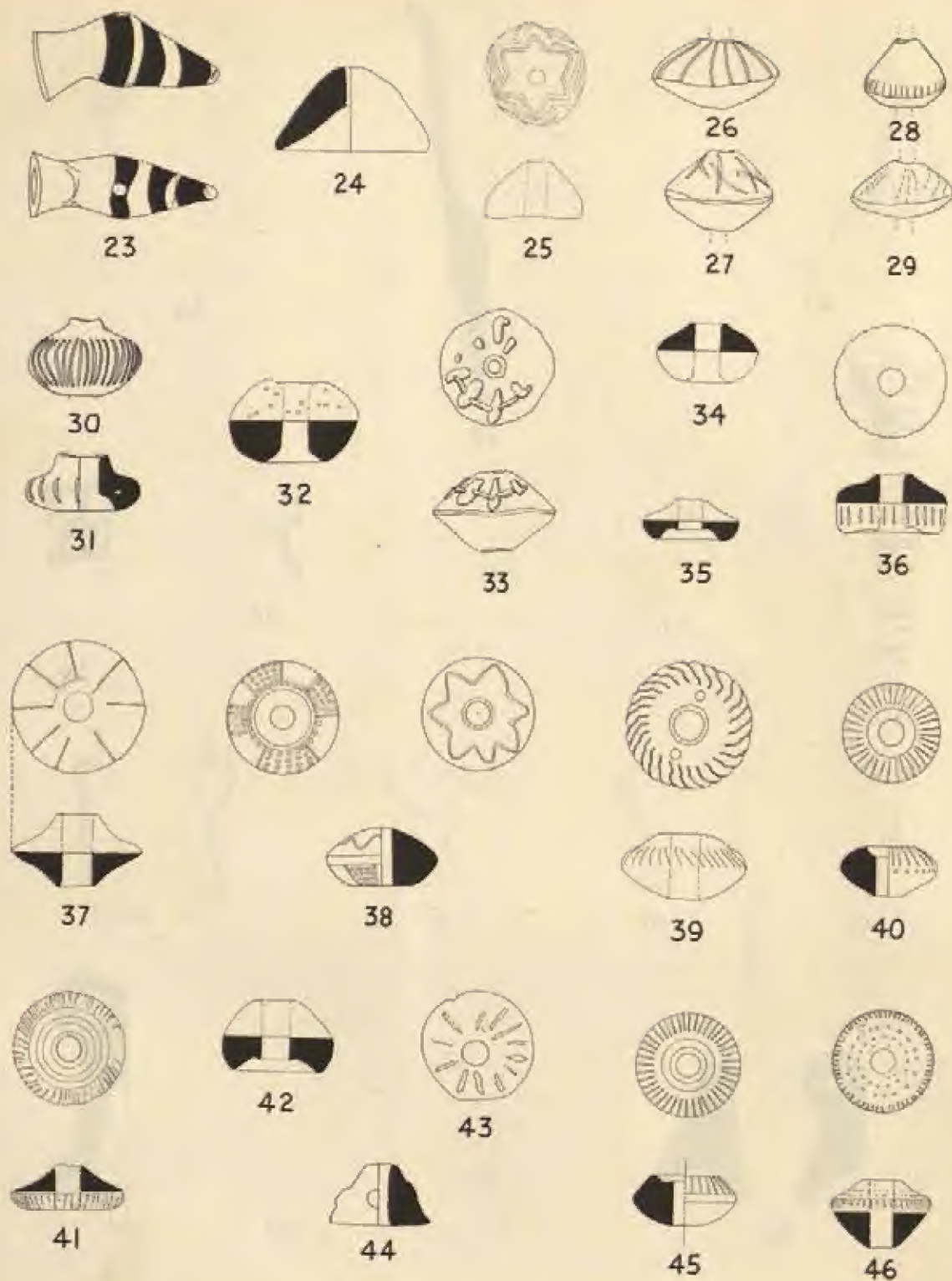
21



22

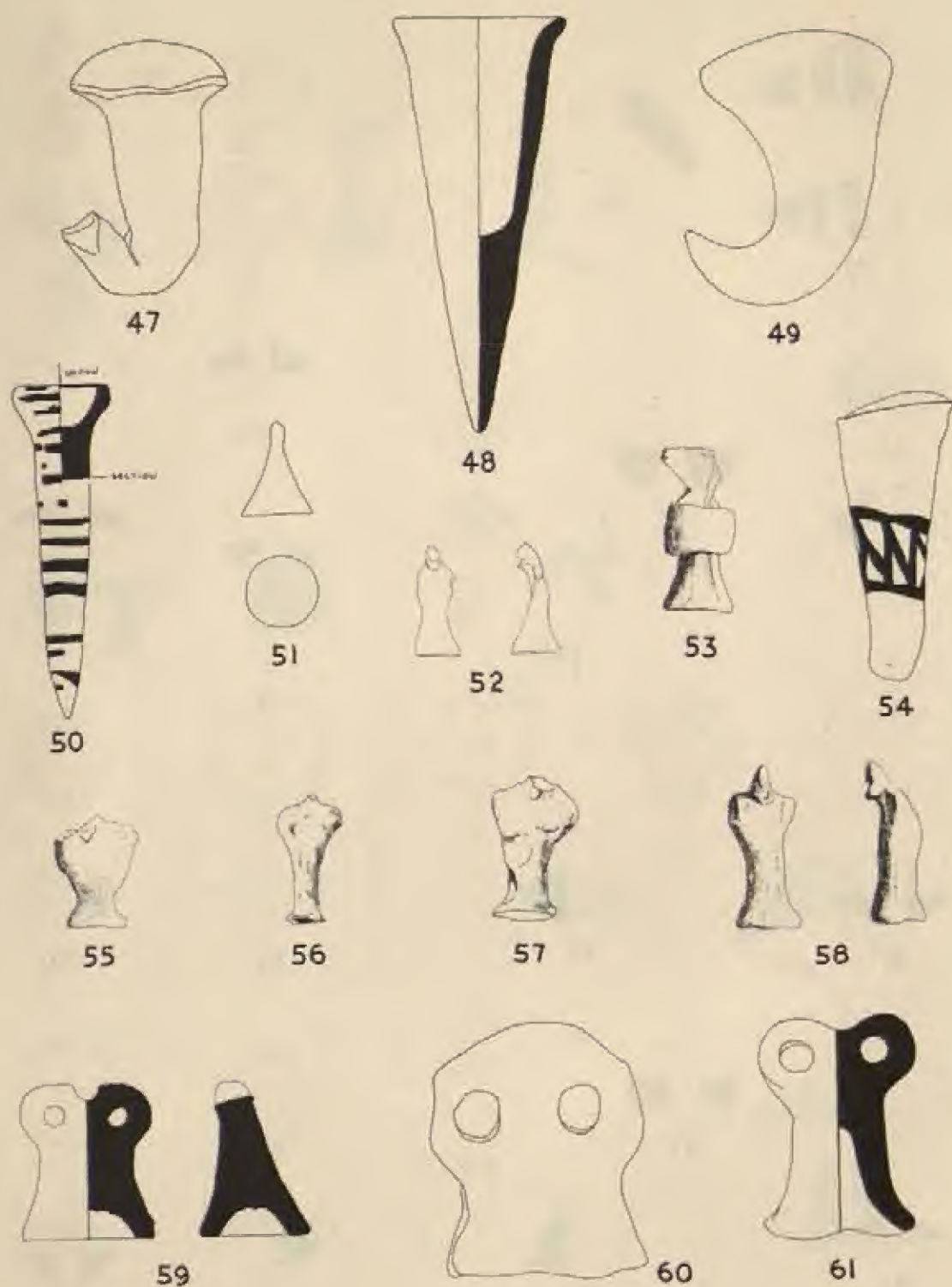
Terra cotta animal figurines.

(Scale 1/2)



Terra cotta spindle whorls.

(Scale 1/2)



Miscellaneous terra cotta objects.

(Scale 1/2; Fig. 59—1/8; Fig. 61—1/5)



62



63



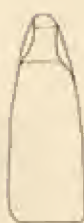
64



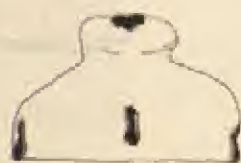
65



66



67



68



69



70



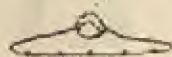
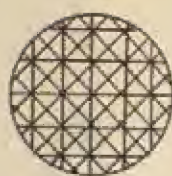
71



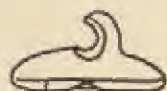
72

Miscellaneous terra cotta objects.

(Scale Figs. 62-67—1/4; Fig. 68—1/10; Figs. 69, 72—1/5; Figs. 70, 71—1/2)



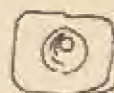
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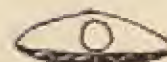
7



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15

Seals and seal impressions.

(Scale 1/1)



Seals and seal impressions.

(Scale 1/1)



Seals and seal impressions.

(Scale 1/1)



46



47



48



49



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51



52



53



54



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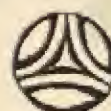
56



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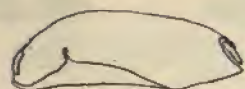
64



65

Seals and seal impressions.

(Scale 1/1)



66

67



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73



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75



76



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78



79



80

Seals and seal impressions.

(Scale 1/1)



81



82



83



84



85



86



87



88



89



90



91



92

Seals and seal impressions.

(Scale 1/1)



93



94



95



96



97



98



99



100



101



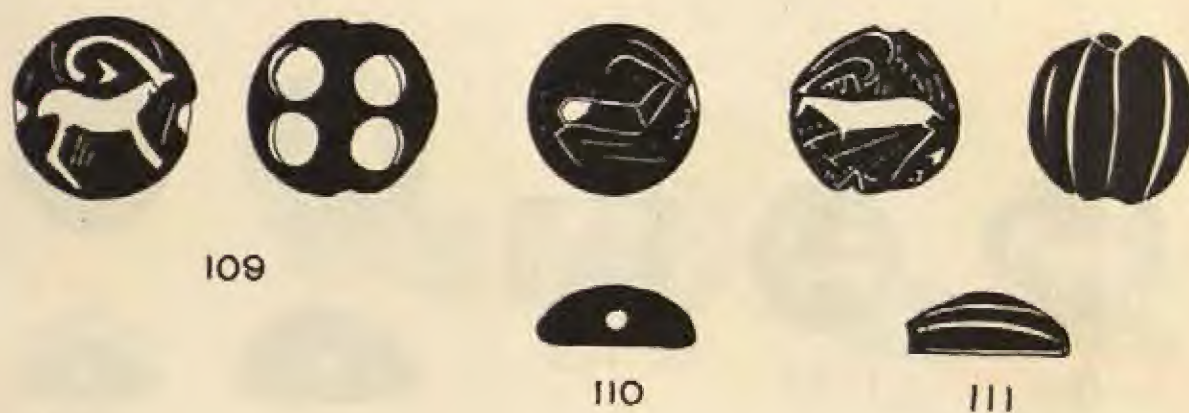
102



103

Seals and seal impressions.

(Scale 1/1; Fig. 95—2/1)



Seals and seal impressions.

(Scale 1/1)



116



117



118



119



120



121



122



123



124



125



126



127



128



129



130

Seals and seal impressions.

(Scale 1/1; Fig. 123-2/1)



131



132



133



134



135



136



137



138



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140



141



142



143



144

Seals and seal impressions.



145



146



147



148



149



150



151



152



153



154



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156



157

Seals and seal impressions.

(Scale 1/1)



158



159



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161



162



163



164



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168



169

Seals and seal impressions.

(Scale 1/1)



170



171



172



173



174



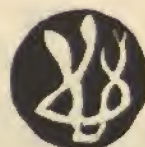
175



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182



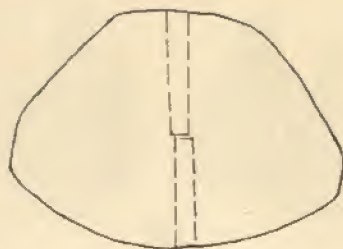
183



184

Seals and seal impressions.

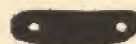
(Scale 1/1)



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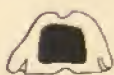
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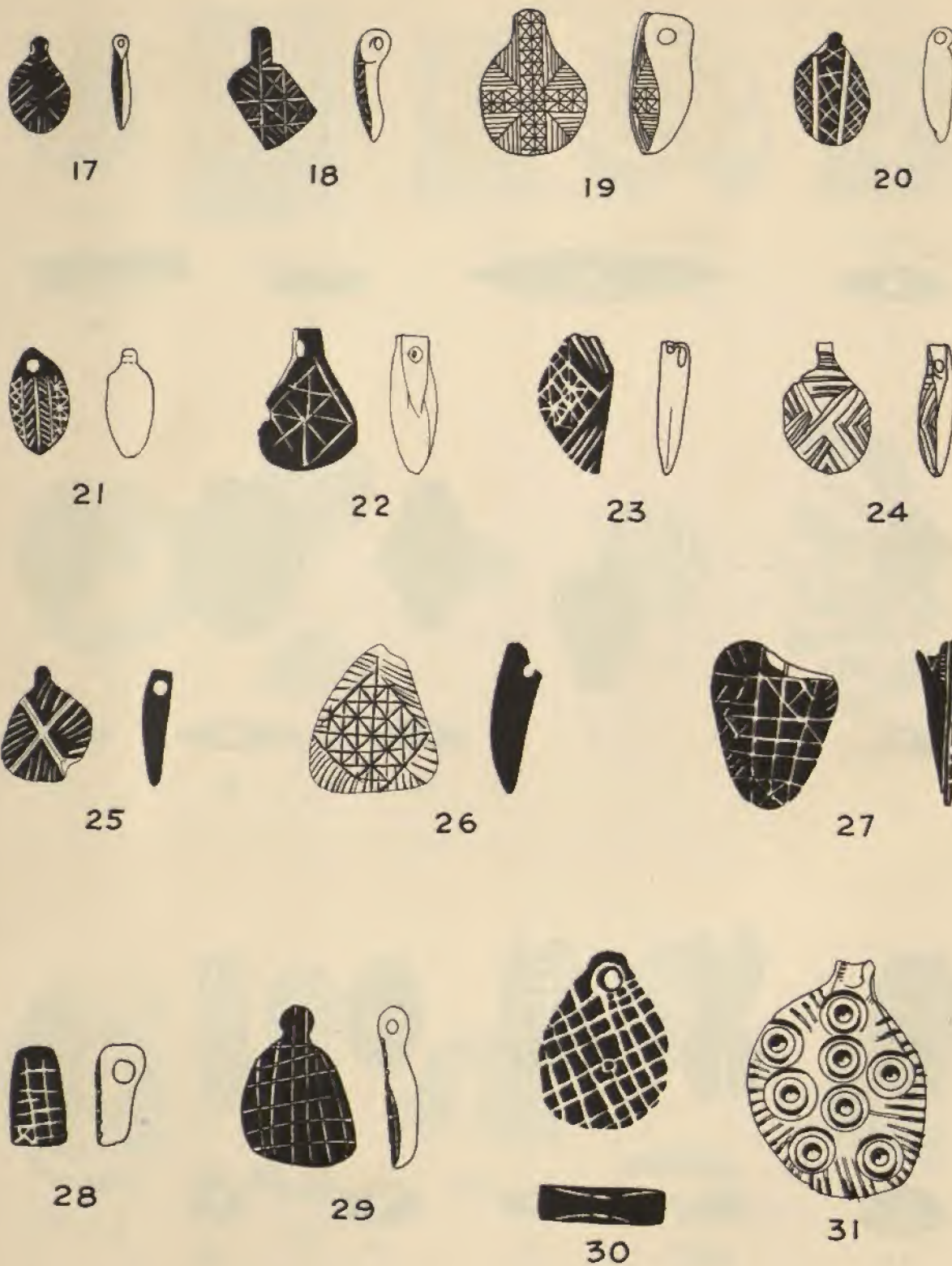


15

16

Beads.

(Scale 1/1)



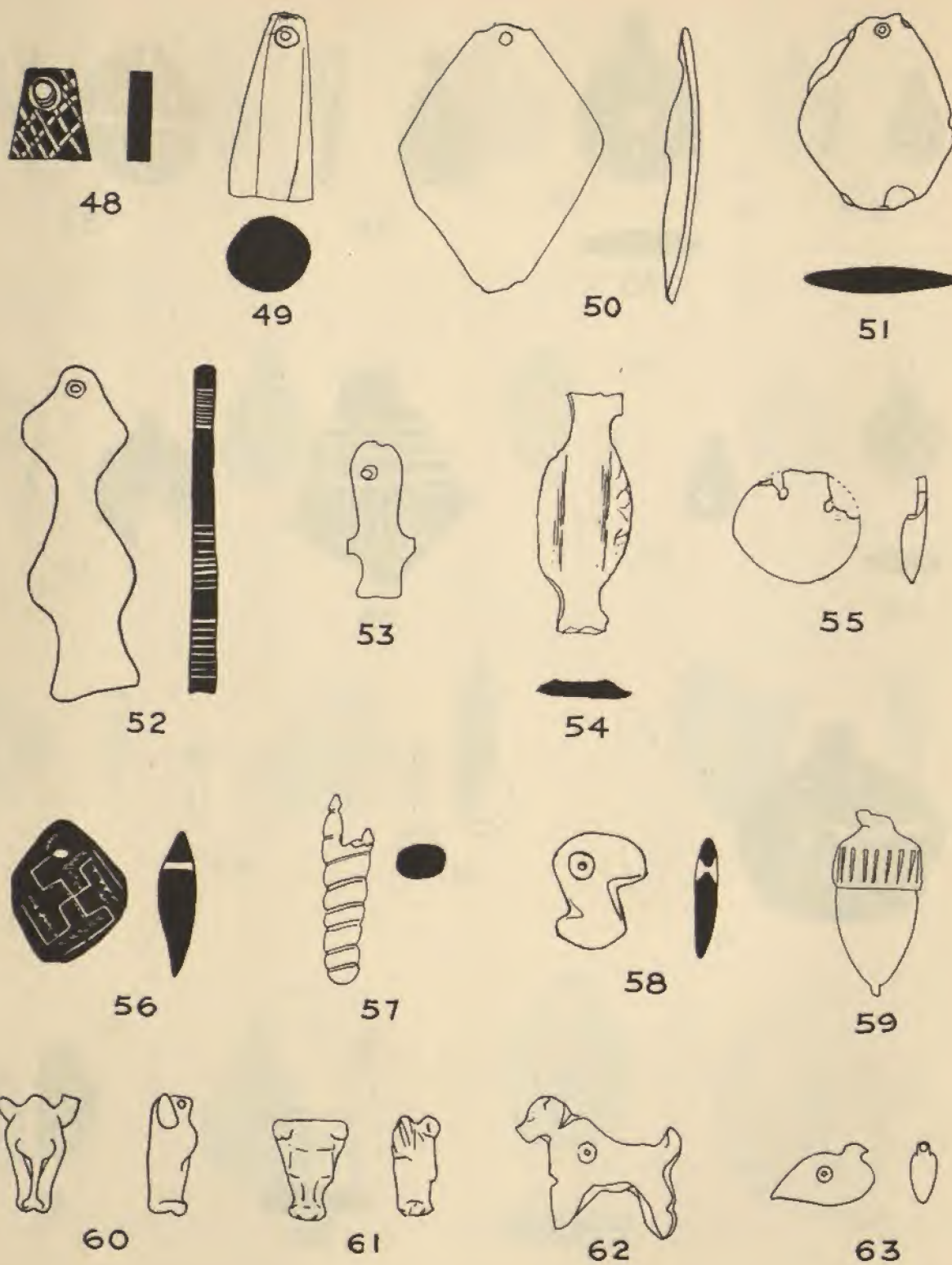
Tanged pendants.

(Scale 1/1)



Tanged and other pendants.

(Scale 1/1)



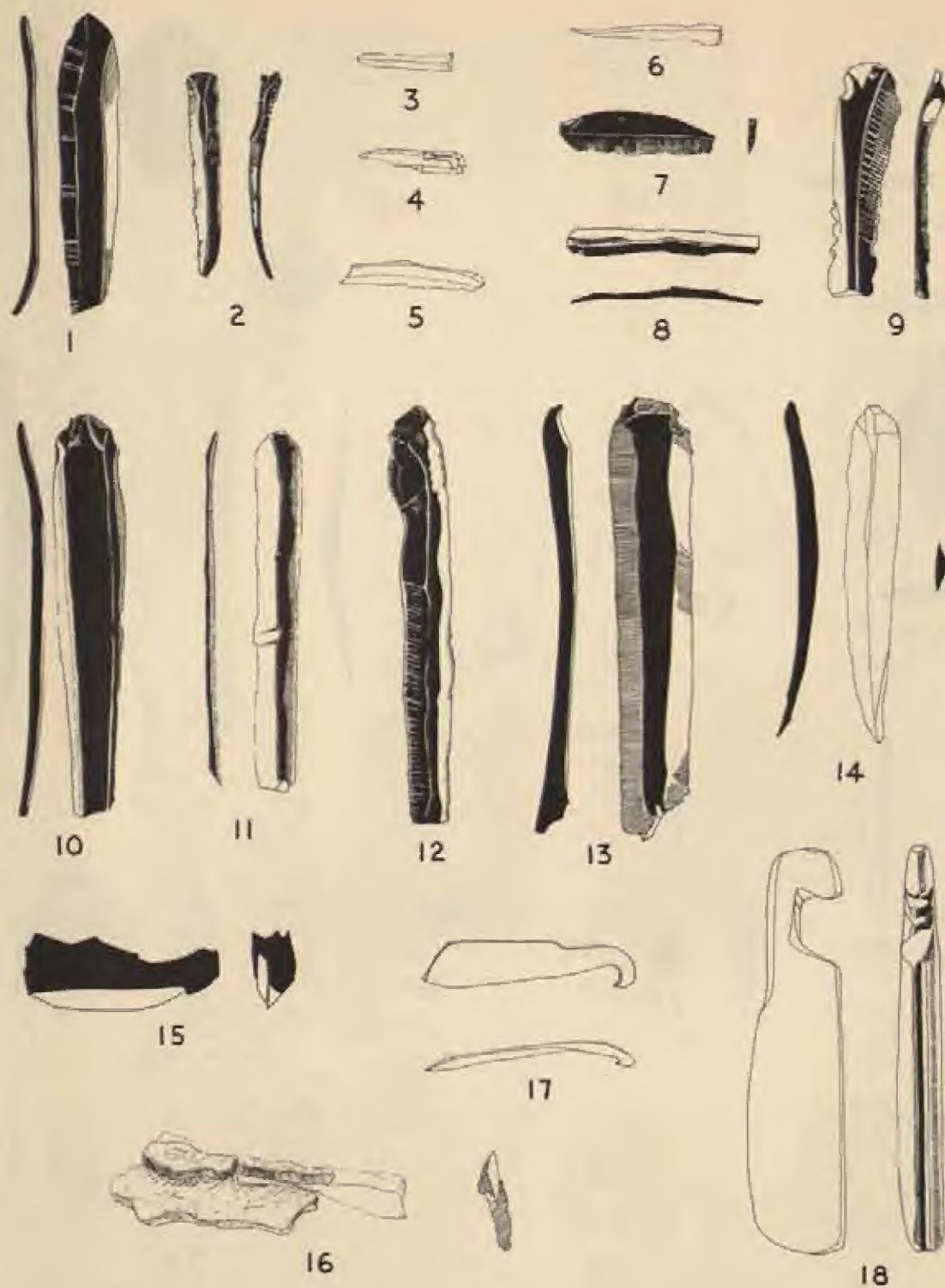
Selected pendants.

(Scale 1/1)



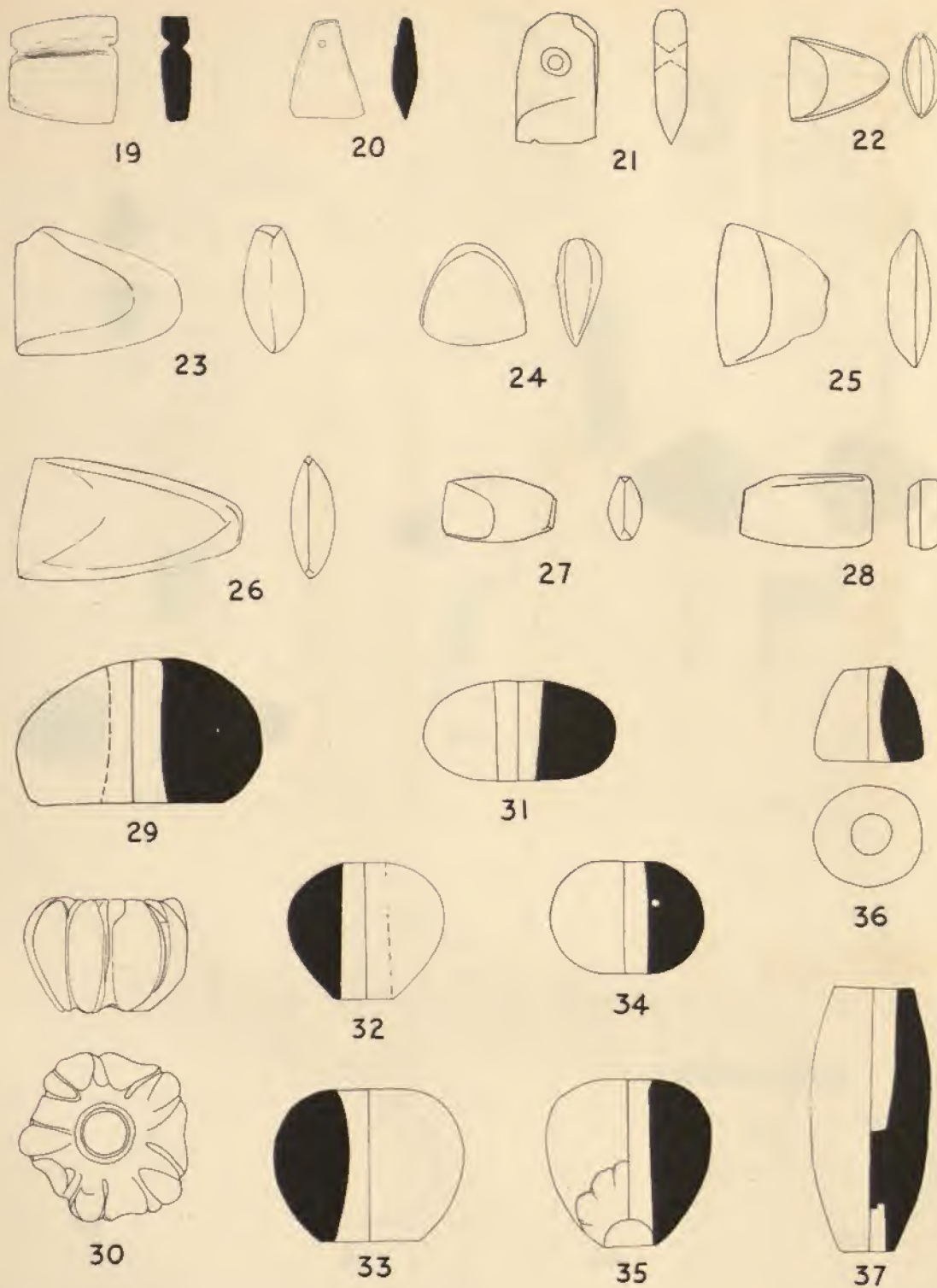
Selected pendants, ornaments, and gold rosette.

(Scale 1/1)



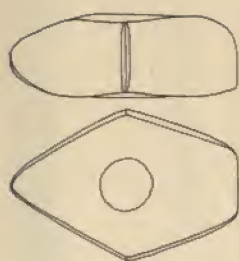
Stone implements.

(Scale 1/2)

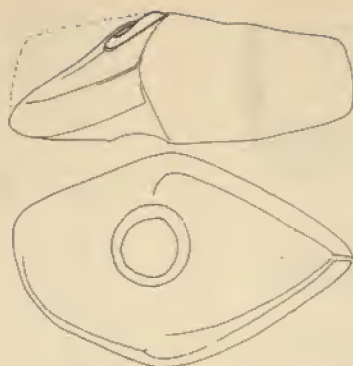


Stone celts and mace-heads.

(Scale 1/2)



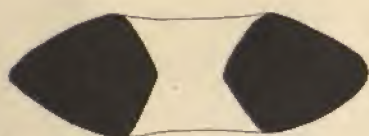
38



39



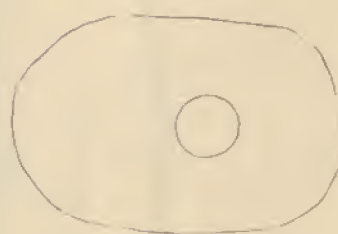
40



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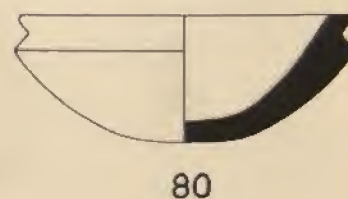
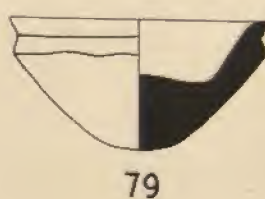
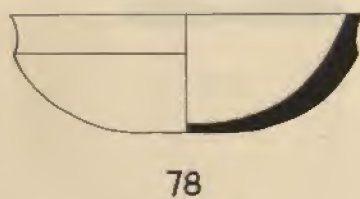
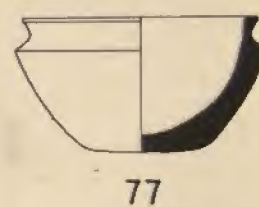
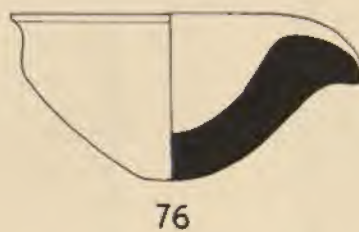
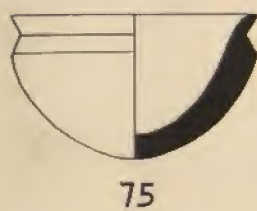
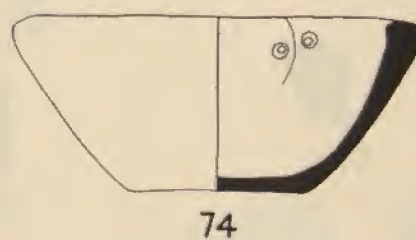
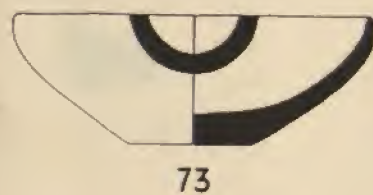
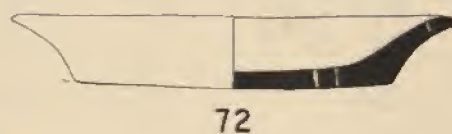
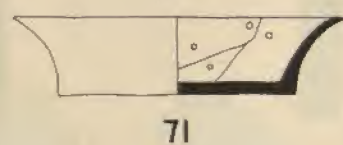
Stone hammers, pestles and grinders.

(Scale 1/2; Figs. 38, 42—1/5)



Miscellaneous stone objects.

(Scale 1/2; Figs. 55-57, 59—1/5)



Stone vessels.

(Scale 1/2; Figs. 75, 77—3/10; Fig. 78—1/4)



Stone vessels.

(Scale 1/2; Fig. 82—1/4; Fig. 86—3/10; Fig. 91—1/5)



Copper and bone objects.

(Scale 1/2; Fig. 3—1/4)





